BDWI640

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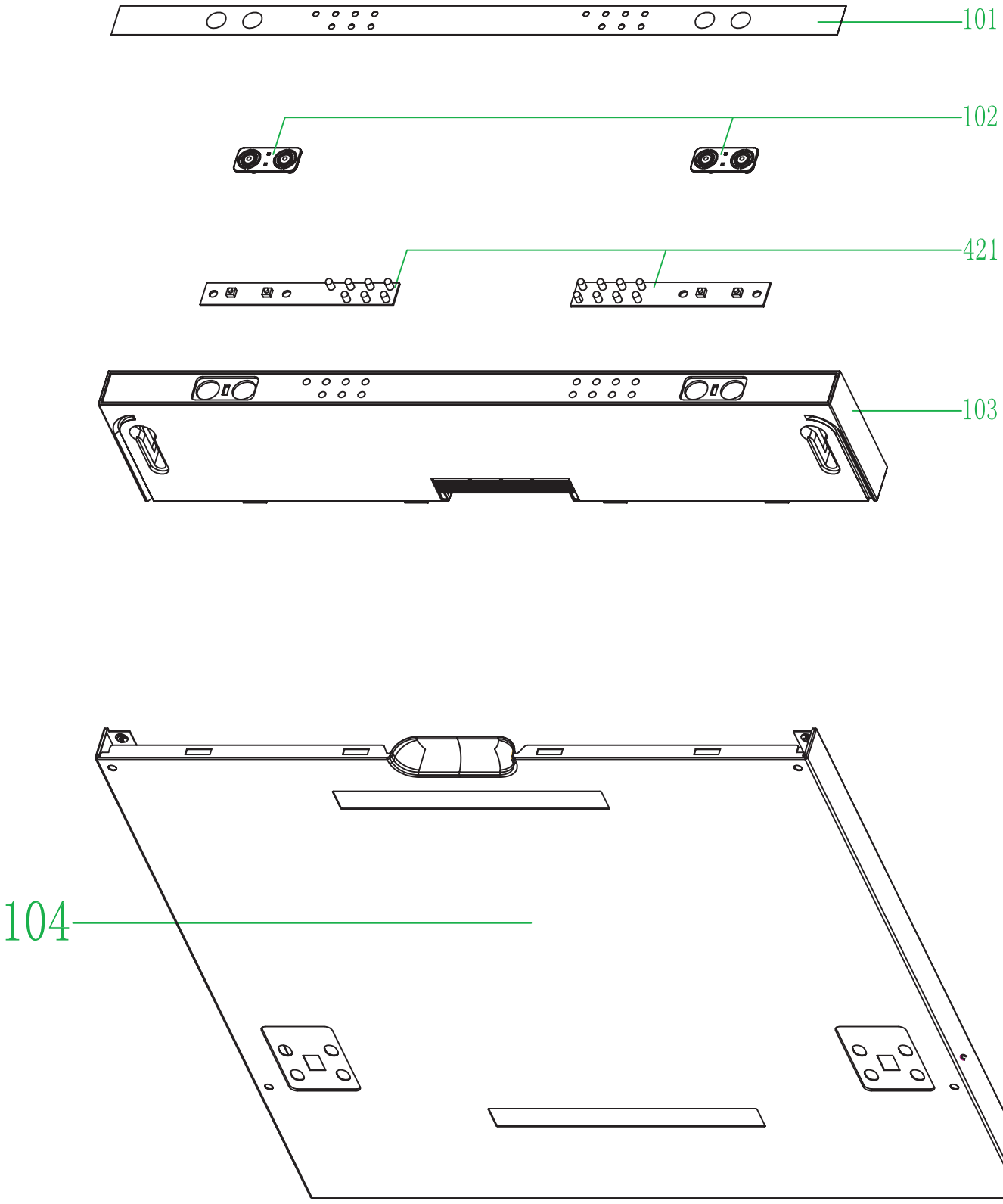
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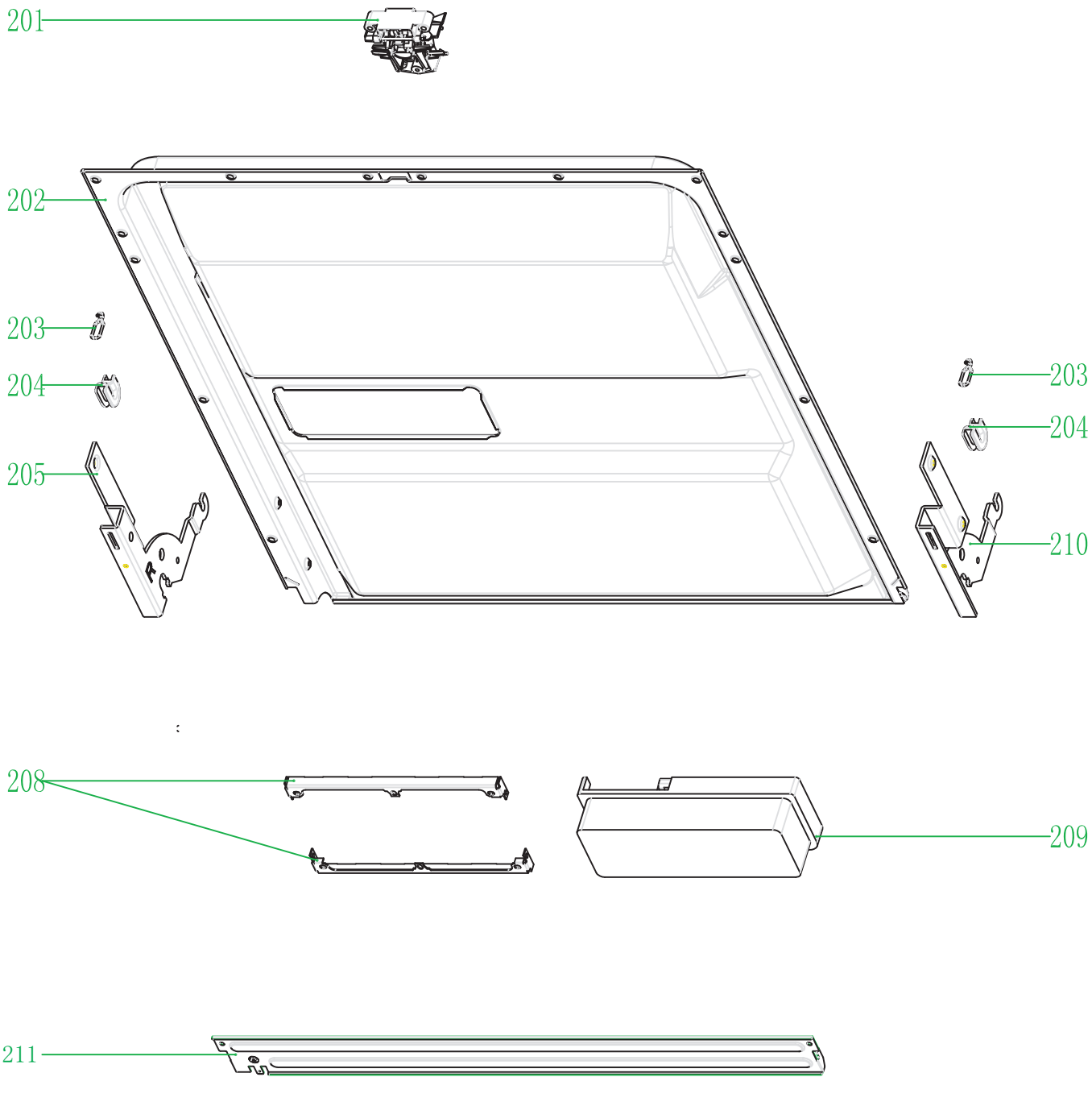
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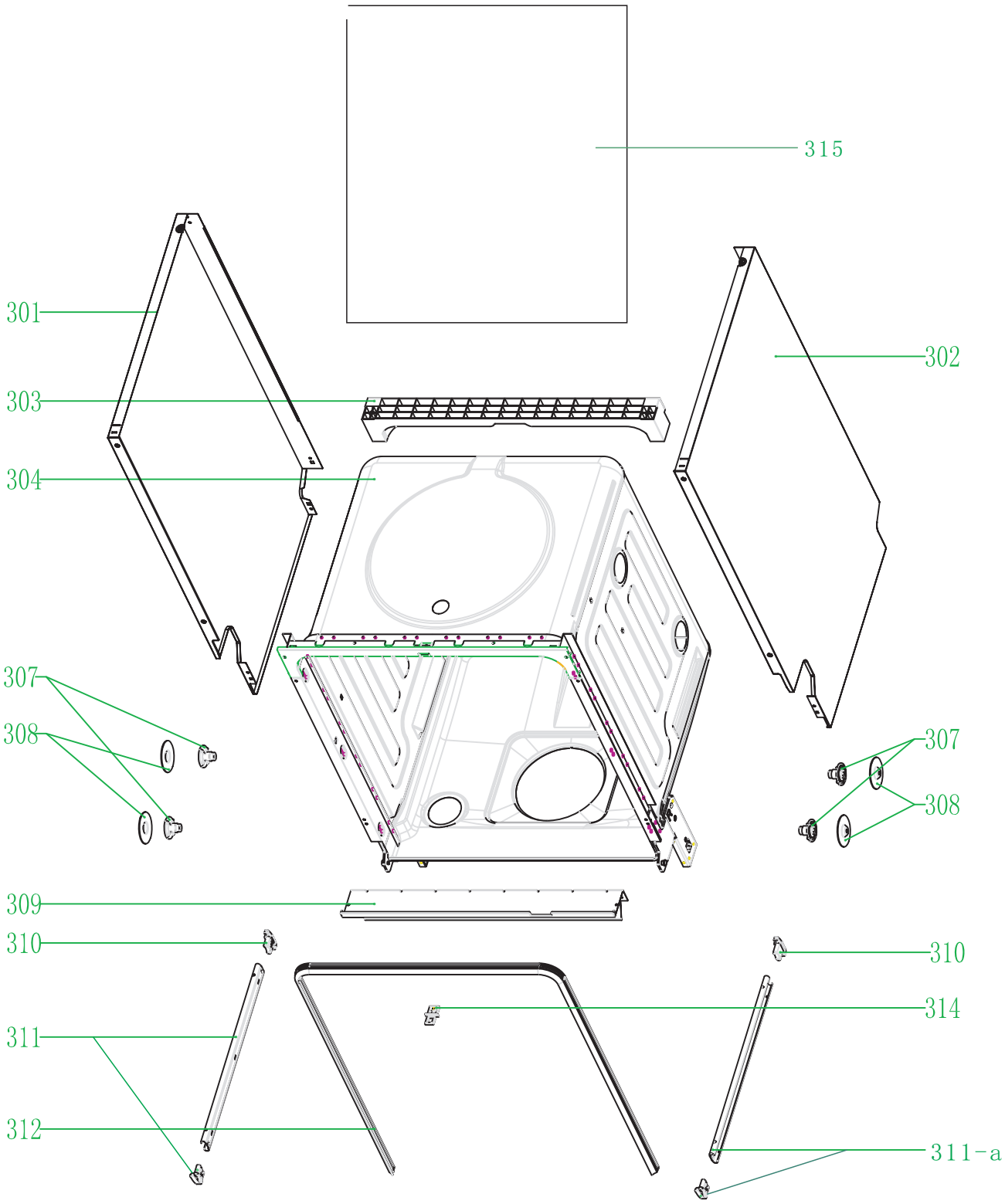
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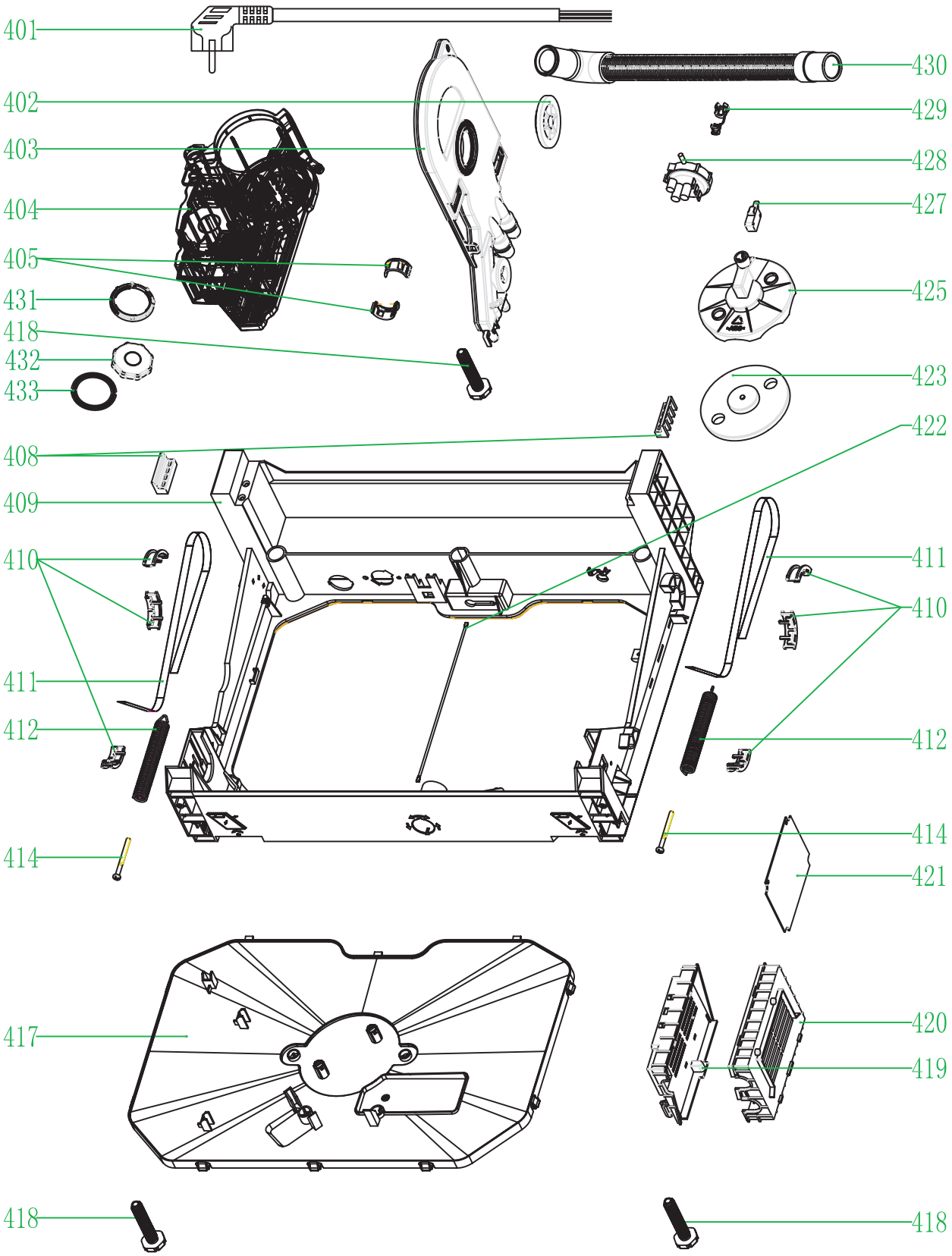
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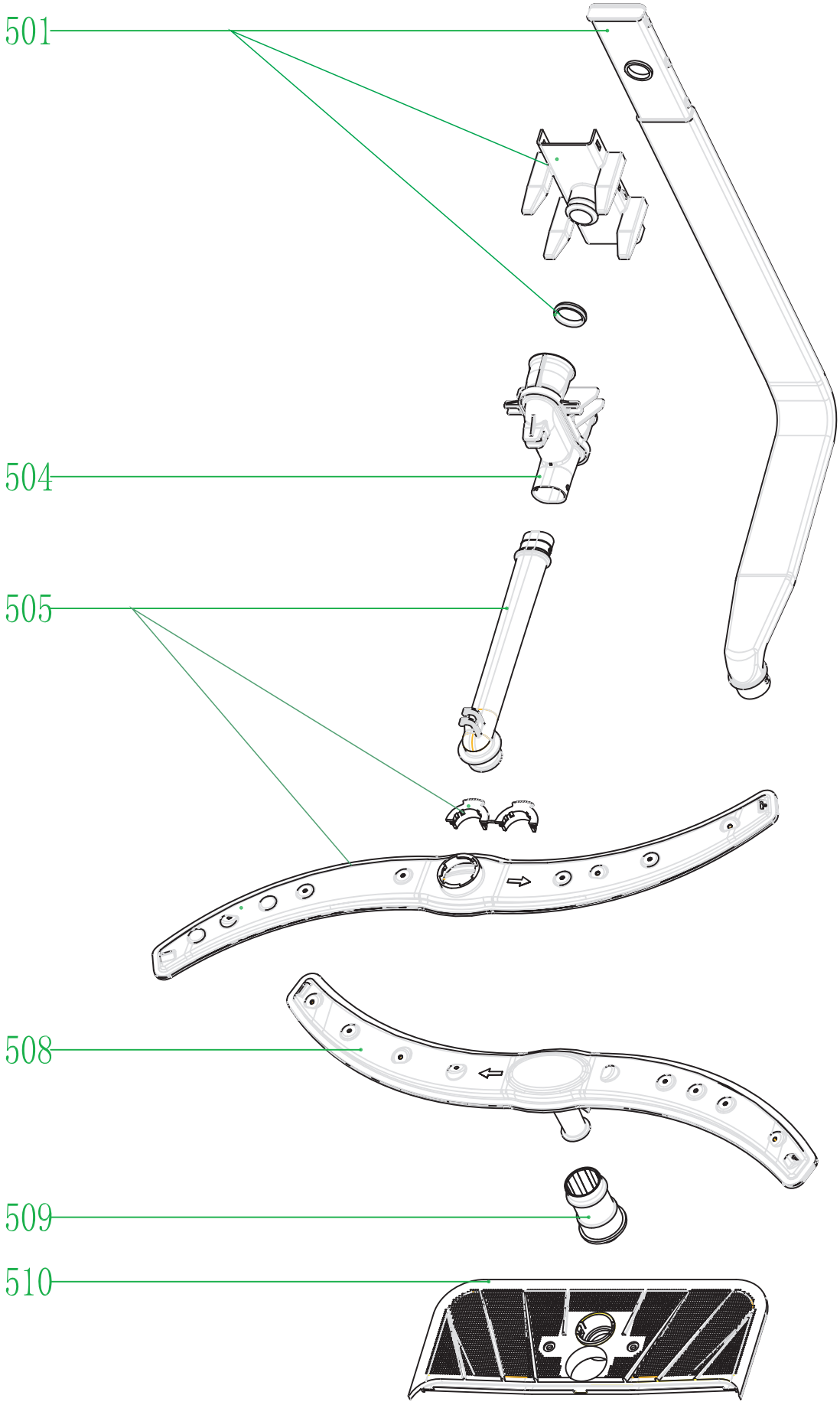
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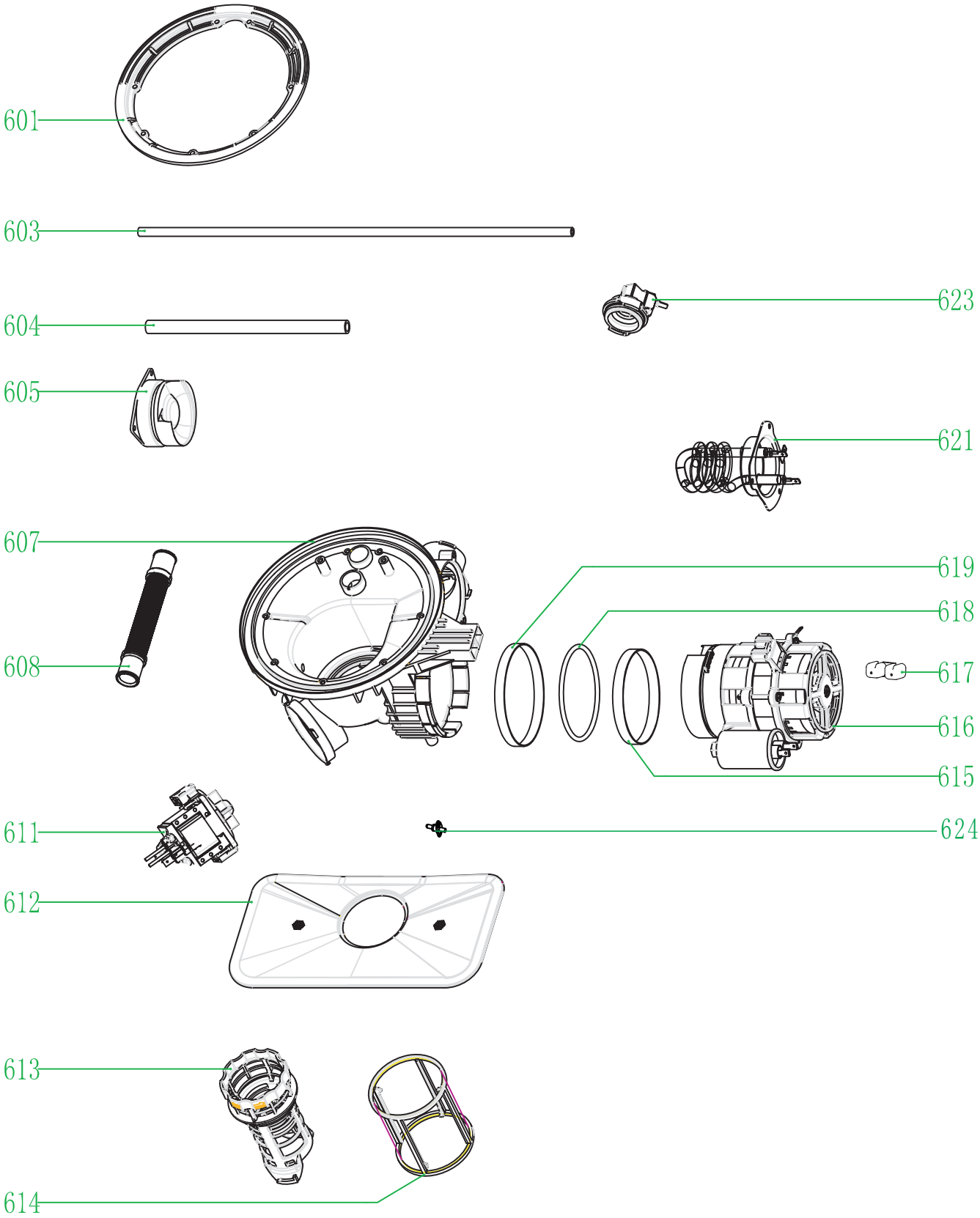
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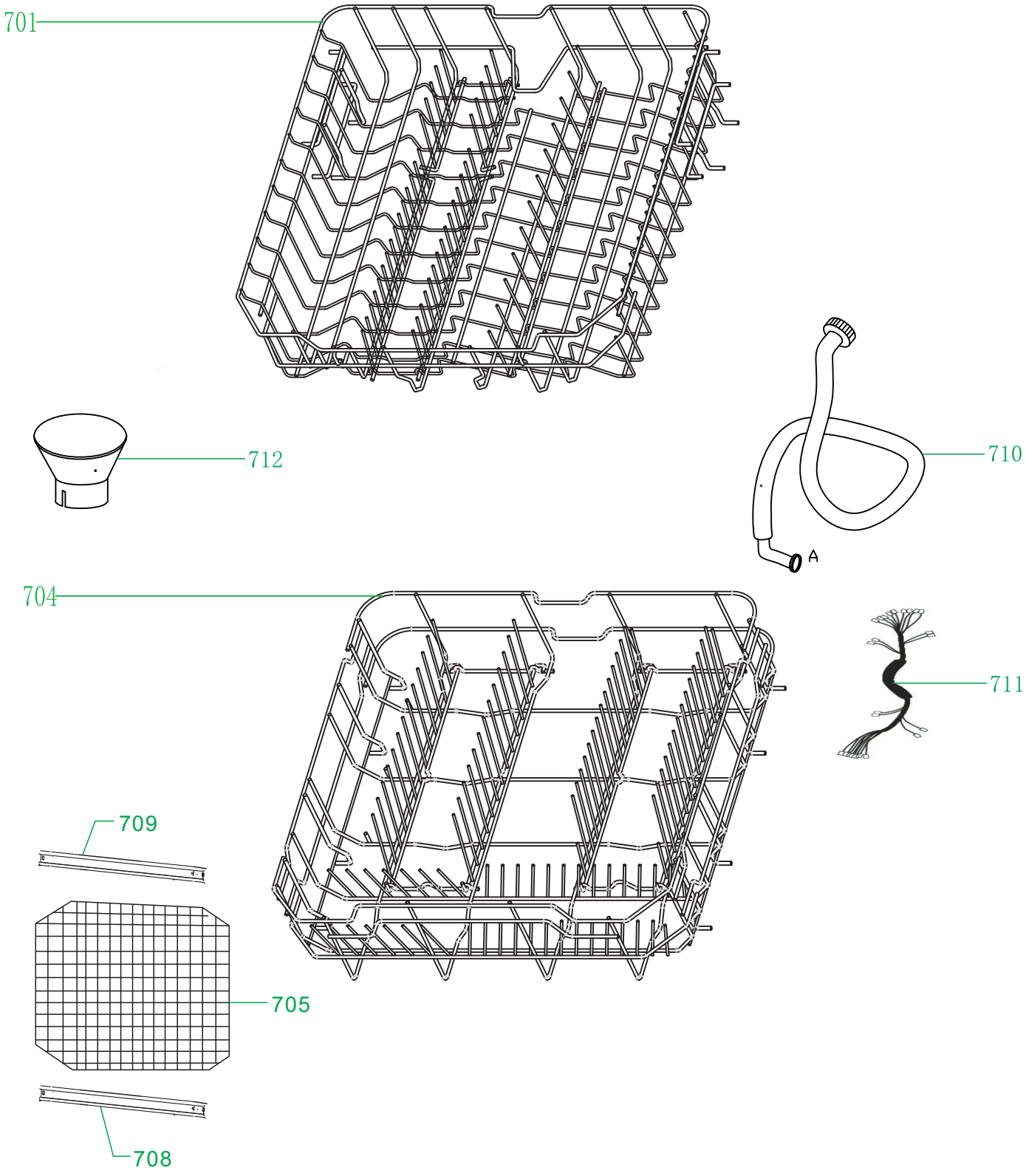
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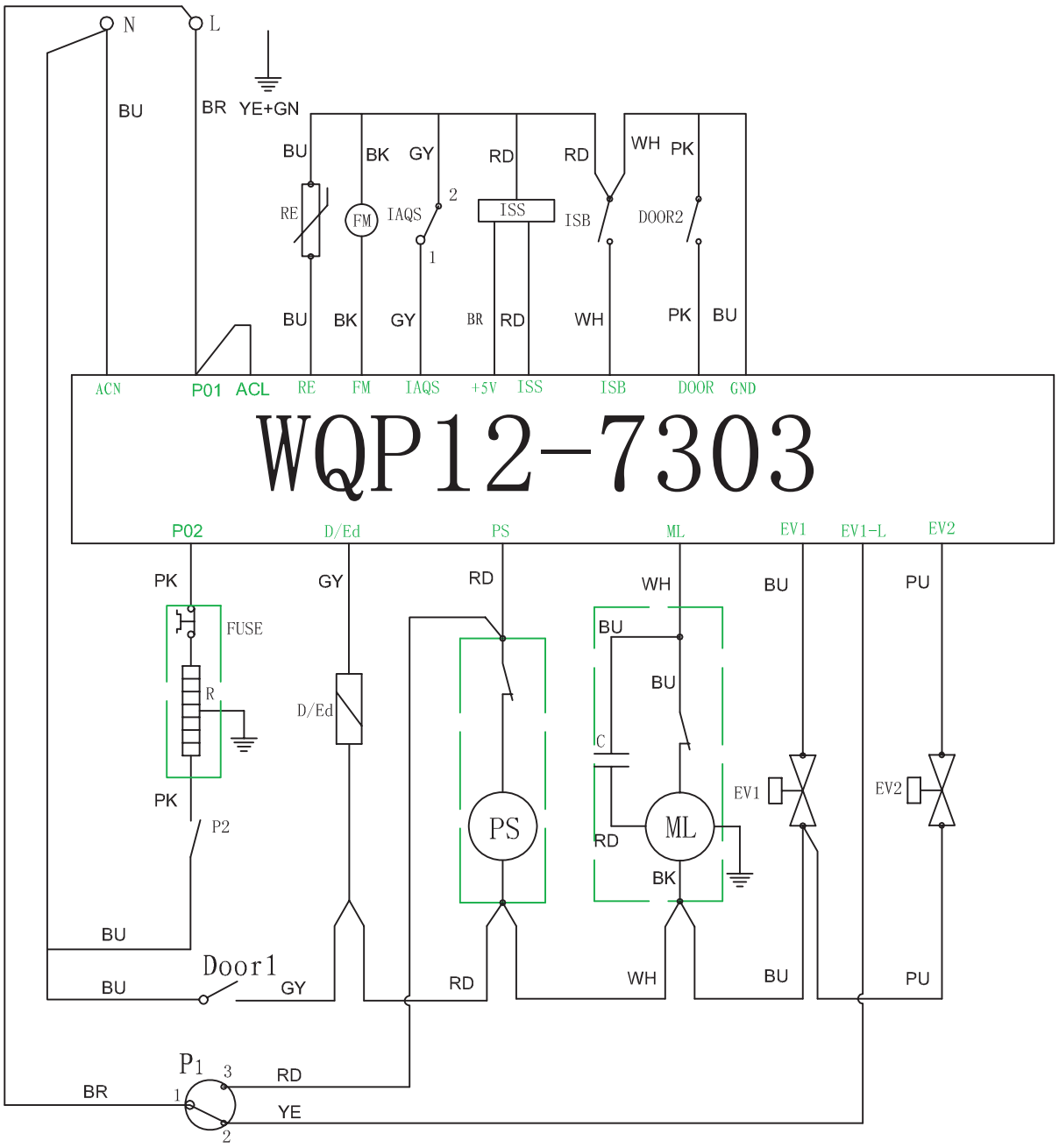
Baumatic

Spare parts list for Baumatic model *BDWI640*

Position	Prefix	Supplier Item code	MODEL NUMBER	Description UK	Currency	Price
	X	670400058131	BDWI640	TEMPLATE	$	
	X	670400058132	BDWI640	INTEGRATION KIT	$	
101	X	673002901290	BDWI640	Control panel cover sticker	$	1.50
102	X	673000802064	BDWI640	Button	$	0.10
103	X	673000495724	BDWI640	Control Panel	$	5.00
104	X	672001804043	BDWI640	OUTER DOOR	$	6.50
201	X	674010030007	BDWI640	DOOR SWICTH ASSEMBLY	$	6.05
202	X	672002200287	BDWI640	INNER DOOR ASSEMBLY	$	17.50
203	X	672002300037	BDWI640	FRICTION STRIP HOOKING	$	0.10
204	X	672002300049	BDWI640	FRICTION STRIP HOOKING clip	$	0.15
205	X	672001400055	BDWI640	LEFT HINGE	$	1.50
208	X	672001700002	BDWI640	DISPENSER BRACKET	$	0.30
209	X	674000800039	BDWI640	DISPENSER	$	7.00
210	X	672001400054	BDWI640	RIGHT HINGE	$	1.50
211	X	672001200061	BDWI640	HINGE join board	$	0.52
301	X	672001607045	BDWI640	LEFT SIDE PANEL	$	6.50
302	X	672001607044	BDWI640	RIGHT SIDE PANEL	$	6.50
303	X	673003100010	BDWI640	UPPER back support	$	0.80
304	X	672001905004	BDWI640	tank assembly	$	39.73
307	X	672001700027	BDWI640	basket guider supporter	$	0.20
308	X	673001300555	BDWI640	basket guider supporting holder	$	0.05
309	X	672002300035	BDWI640	anti-noise borad	$	1.00
310	X	673001300554	BDWI640	UPPER BASKET guider link stopper (back)	$	0.10
311	X	672001700025	BDWI640	UPPER BASKET guider (Left)	$	1.19
311-a	X	672001700026	BDWI640	UPPER BASKET guider (Right)	$	1.20
312	X	673001700109	BDWI640	door seal GASKET	$	2.00
314	X	672001400042	BDWI640	DOOR LOCK HOOK	$	0.20
315	X	673000102002	BDWI640	Back cover board	$	0.98
401	X	674000000186	BDWI640	Power cord	$	2.50
402	X	673001600058	BDWI640	AIR BREAKER NUT	$	0.15
403	X	673002700601	BDWI640	AIR BREAKER ASSY - **until s/n 66120932579**	$	8.14
403	X	673002700602	BDWI640	AIR BREAKER ASSY - **from s/n 66120932580**	$	8.14
404	X	674000700032	BDWI640	SOFTENER ASSEMBLY	$	8.05
405	X	673001300557	BDWI640	DRAIN pipe CLAMPING	$	0.10
408	X	673001300556	BDWI640	tub Support	$	0.15
409	X	673000103020	BDWI640	Base ASSEMBLY	$	7.00
410	X	673001000052	BDWI640	FRICTION STRIP GUIDING	$	0.05
411	X	672002300036	BDWI640	FRICTION STRIP	$	0.05
412	X	672000190026	BDWI640	DOOR SPRING ASSEMBLY	$	1.00
414	X	672001100016	BDWI640	adjust screw OF DOOR SPRING	$	0.05
417	X	673000101027	BDWI640	base cover	$	1.50
418	X	673001400210	BDWI640	foot	$	0.50
419	X	673002400129	BDWI640	pcb seat cover	$	0.50
420	X	673002400128	BDWI640	pcb seat	$	0.50
421	X	674001000953	BDWI640	PCB	$	24.00

421	X	674001001431	BDWI640	PCB - Resume function EXPORT markets only	$	
422	X	673001400211	BDWI640	Adjust pole	$	0.35
423	X	673001490013	BDWI640	FLOAT	$	0.15
425	X	673001400197	BDWI640	overflow switch seat	$	0.50
427	X	674010030006	BDWI640	overflow switch	$	1.00
428	X	674000300072	BDWI640	PRESSURE SWITCH	$	2.50
429	X	673001400083	BDWI640	power supply loom clamping	$	0.05
430	X	673000900292	BDWI640	DRAIN pipe	$	2.00
431	X	673001600068	BDWI640	SOFTENER nut - **until s/n 66120932579**	$	0.20
431	X	673001600074	BDWI640	SOFTENER nut - **from s/n 66120932580**	$	0.22
432	X	673002800161	BDWI640	SOFTENER cover - **until s/n 66120932579**	$	0.30
432	X	673002800168	BDWI640	SOFTENER cover - **from s/n 66120932580**	$	0.33
433	X	673001500102	BDWI640	SOFTENER rubber - **until s/n 66120932579**	$	0.11
433	X	673001500114	BDWI640	SOFTENER rubber - **from s/n 66120932580**	$	0.11
501	X	673000900343	BDWI640	INNER PIPE ASSEMBLY	$	1.50
504	X	673001900023	BDWI640	water DISPENSER ASSEMBLY	$	0.70
505	X	673001900027	BDWI640	MIDDLE SPAYER PIPE ASSEMBLY	$	1.50
508	X	673000330000	BDWI640	LOWER SPRAYER	$	1.50
509	X	673001300548	BDWI640	LOWER SPRAYER seat	$	0.15
510	X	673002500112	BDWI640	PLASTIC FILTER	$	0.50
601	X	673001600057	BDWI640	SUMP NUT	$	0.30
603	X	673000900160	BDWI640	PVC pipe	$	0.30
604	X	673000900290	BDWI640	softener outlet pipe	$	0.30
605	X	673001300560	BDWI640	HEATING cab COVER	$	0.15
607	X	673000701014	BDWI640	SUMP ASSEMBLY	$	2.00
608	X	673000900287	BDWI640	INNER DRAIN pipe	$	0.60
611	X	674000600129	BDWI640	Drainage pump	$	6.50
612	X	673002500110	BDWI640	main filter	$	3.00
613	X	673001300559	BDWI640	filter handle	$	0.50
614	X	673002500111	BDWI640	CYLINDR FILTER	$	0.80
615	X	673001500069	BDWI640	PUMP VIBRATION-PROOF PAD	$	0.20
616	X	674005600075	BDWI640	WASH PUMP ASSEMBLY	$	28.50
617	X	672002300038	BDWI640	motor holder	$	0.10
618	X	673001500111	BDWI640	PUMP GASKET	$	0.20
619	X	672000700031	BDWI640	940 CLAMPING	$	0.30
621	X	674001100053	BDWI640	HEATING ELEMENTS ASSEMBLY	$	10.00
623	X	674010020004	BDWI640	WATER PRESSURE SWITCH ASSEMBLY	$	2.00
624	X	674000900038	BDWI640	Sensing device	$	1.50
701	X	672000802032	BDWI640	UPPER BASKET ASSEMBLY	$	14.50
704	X	672000820000	BDWI640	LOWER BASKET ASSEMBLY	$	15.50
705	X	677100900005	BDWI640	cutlery ASSEMBLY	$	4.50
708	X	672001700023	BDWI640	Cutlery tray guide rail (Left)	$	0.80
709	X	672001700024	BDWI640	Cutlery tray guide rail (right)	$	0.80
710	X	674000200041	BDWI640	Inlet hose assembly	$	10.00
711	X	674002000034	BDWI640	Wiring harness	$	10.50
712	X	673002200165	BDWI640	Salt filler	$	0.20

220-240V/50HZ

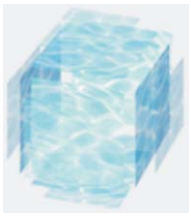


CODE	名称	Designation
ACL	火线	Live(Alternating Current)
ACN	零线	Neutra(Alternating Current)
E	地线	Earth
D/Ed	分配器	Dispenser
EV1	进水阀	Inlet Valve
EV2	再生阀	Softener Valve
IAQS	溢流开关	Overflow Switch
CB	控制板	Control Board
FM	流量计	Flow Meter
P2	无水保护压力开关	Dry Heating Protect Switch
P0	水位压力开关	Water Level Switch(83/63)
P1	水位压力开关	Water Level Switch(140/120)
LSB	亮碟剂指示灯	Rinse Aid Indicator
ISB	亮碟剂检测开关	Rinse Aid Detector
EV3	分水阀	Water Diverter
S2	马达热保护器	Protection Overheating(PS)
S1	马达热保护器	Protection Overheating(ML)
C	电容	Capacitor
FUSE	熔断器	Fuse(3.15A)
TS□	□℃ 温控器	□℃ Thermostat
FAN	风扇	Fan
IG	电源开关	Power Switch
PS	排水泵	Drain Pump
DP		
ML	洗涤泵	Wash Pump
LSS	盐指示灯	Salt Indication
ISS	盐检测开关	Salt Detector
LS	电源指示灯	Power Indication
F	滤波器	Fliter
ITR2	热熔断器	Temperature Fuse
ITR1	保护温控器	Safety Thermostat
R	加热管	Heater
DOOR	门开关(弱电)	Door Switch
IS	门开关(强电)	Door Switch
RE	热敏电阻	Temperature sensor(NTC)
TM	程控器电机	Timer Motor
SMPS	开关电源	Switching Mode Power Supply

CODE	名称	Designation
BU	蓝色	Blue
YE	黄色	Yellow
GN	绿色	Green
WH	白色	White
RD	红色	Red
BK	黑色	Black
PK	粉色	Pink
GY	灰色	Gray
OR	橙色	Orange
BR	棕色	Brown
VT	紫色	Violet
PU	紫色	Purple
CL	透明色	Clear
YE+GN	黄绿双色线	Yellow+Green bicolor
□+△	双色线	□+△ bicolor

CODE	名称	Designation
SS	选择开关	Option Switch
R0	电阻	Resistance
WP	循环泵	Wash And Drain Pump
PLUS	强力洗开关	PLUS Switch
RAPID	快速洗开关	RAPID Switch
TS	定时器	Timer
S(1/2)	半载洗开关	Halfload Switch
TF	变压器	Transformer
CN	线束插座	Electric Connector
RY	继电器	Relay
NS	浊度计	Nephelometer

Technical Service Manual



Dishwasher

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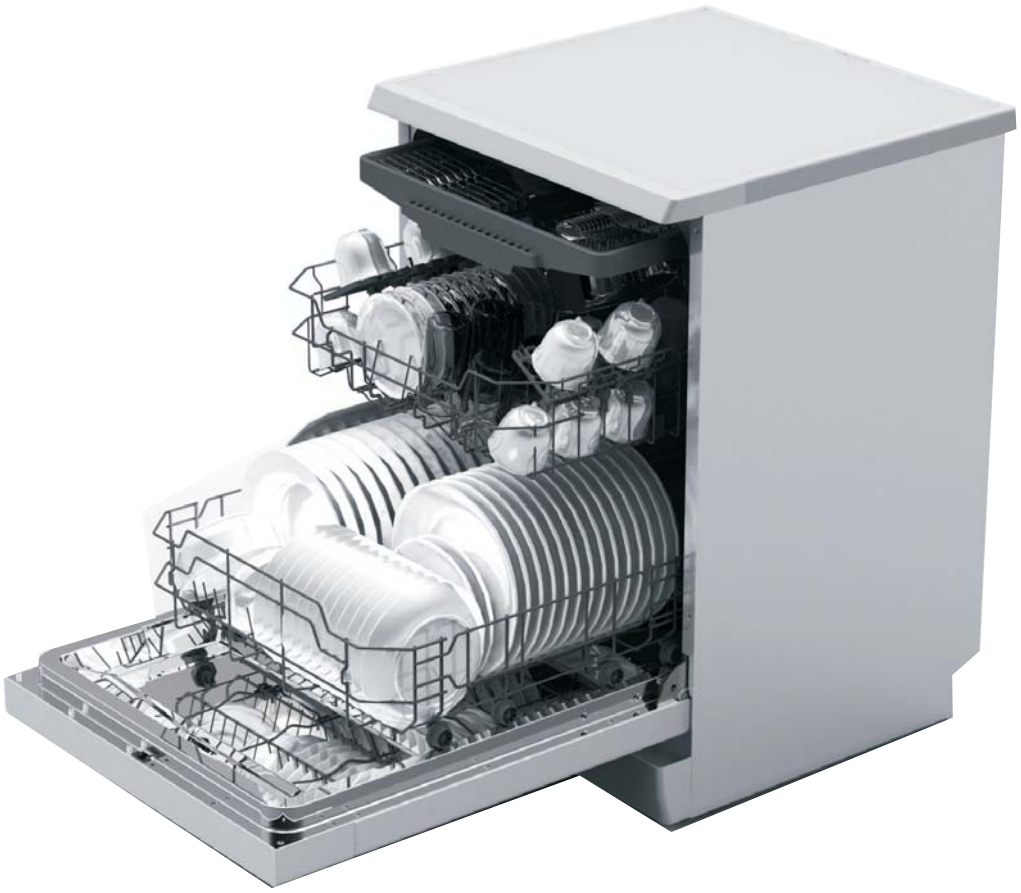
SAFETY NOTICE

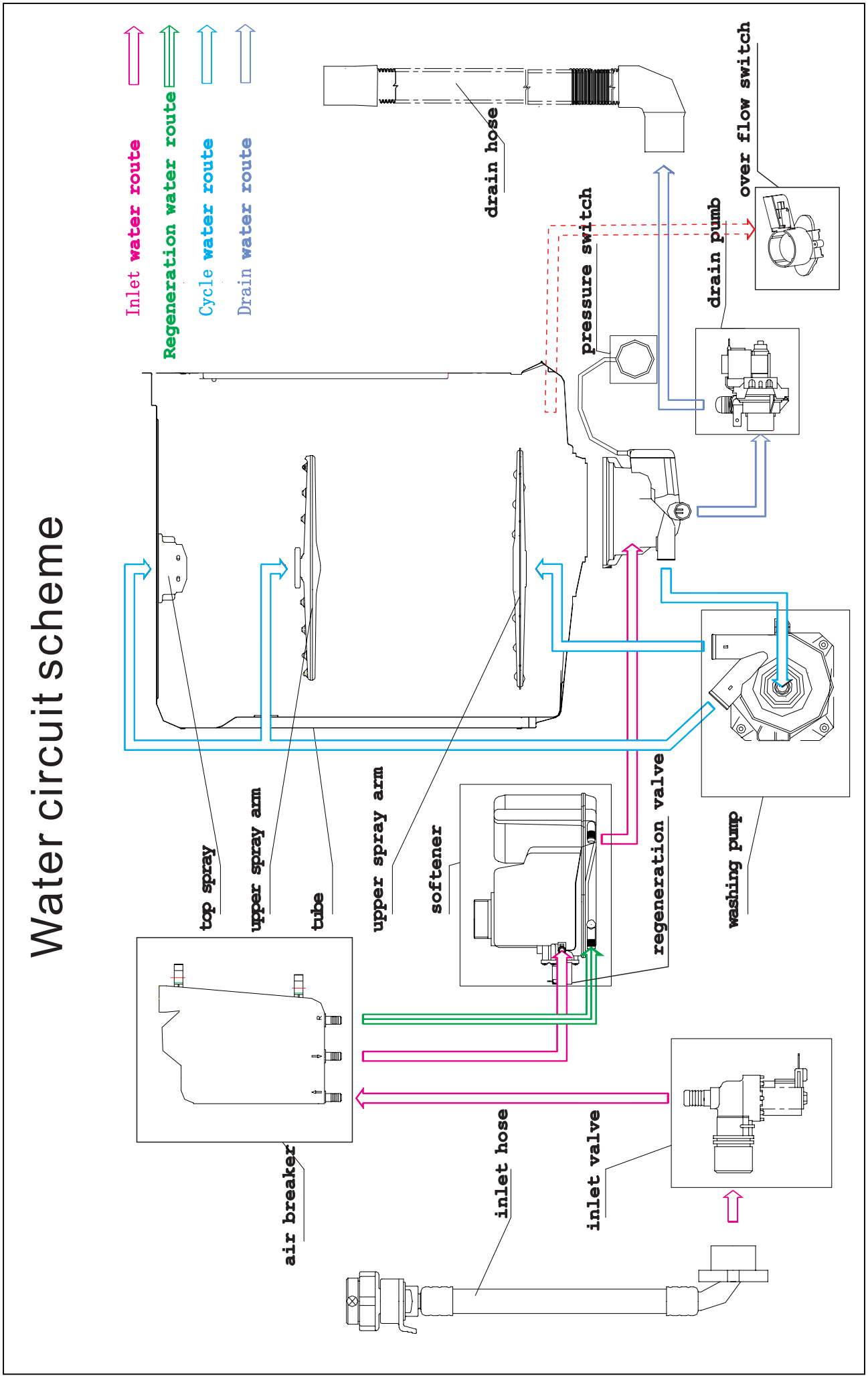
This documentation is only intended for qualified technicians who are aware of the respective safety regulations.

Models: WQP12-J7311A



Electrical supply	220-240V, 50Hz
Supply water pressure	0.04MPa-1.0MPa
Supply water temperature	below 60℃

For the basic operation instructions, please refer to the instruction manual attached with each unit.


Water circuit scheme
Inlet water route
Regeneration water route
Cycle water route
Drain water route
drain hose
over flow switch
pressure switch
drain pumb
top spray
upper spray arm
tube
upper spray arm
softener
regeneration valve
washing pump
air breaker
inlet hose
inlet valve

Process of water inlet (indicated by magenta route)

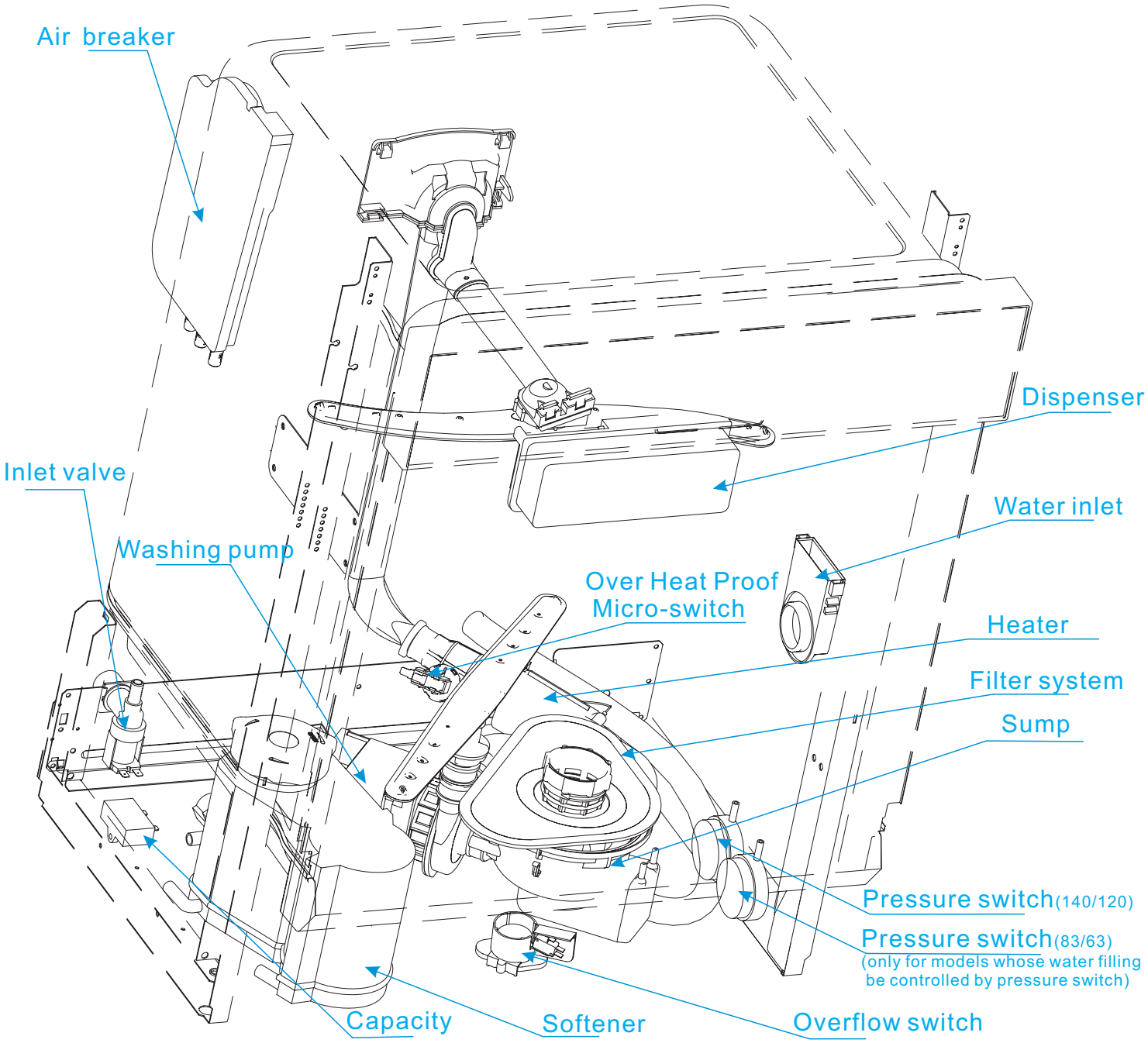
In this process, regeneration water route is cut off, main water route is open. The water in the main water route is softened when pass through the softener, and then enter in the tub. During this phase, some of inlet water will be stored in the air breaker to be regenerating water.

Process of cycle washing (indicated by blue route)

Cycle washing action is driven by washing pump motor. Water can obtain the power during it passing through the working washing pump, then be pumped into spray arm, pass from spray arm nozzles, over the dishes, into sump ,where connect to washing pump, and to get in the next water cycle.

Process of regeneration (indicated by green route)

Regeneration valve is open, the regenerating water dissolve salt in the salt chamber of softener, and then enter in the resin tank to reactivate the resin.



Please Note: Exploded view and part list of each model have some different visions, so please refer to newest vision Midea sent you.

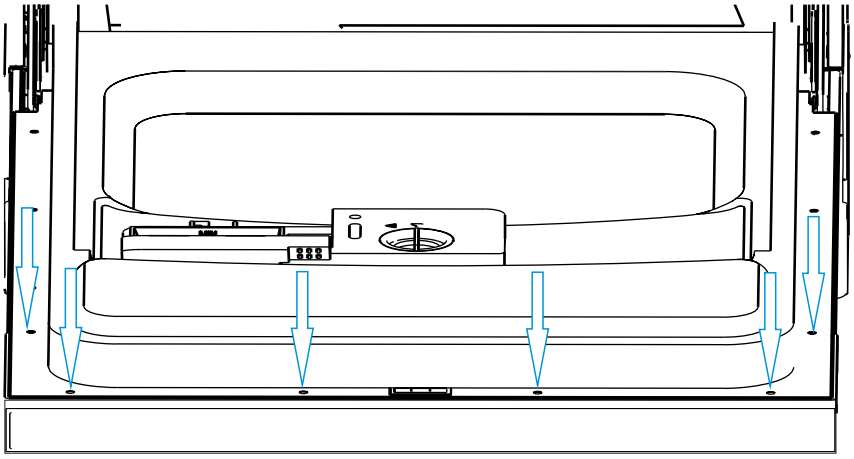
PCB

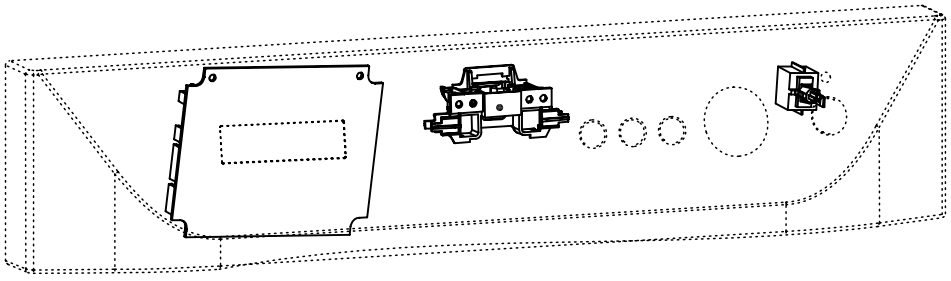
Printed Circuit Board is the control center of dishwasher, which receive and process signal from components, send order to components and deal with the feedback information, etc.

Access PCB

Removing the control panel

The control panel can be removed from dishwasher door.
1. Remove the six screws securing the control panel to the door.
2. The control panel will drop down and be free of the door. But, the wiring will still connected to the control panel.

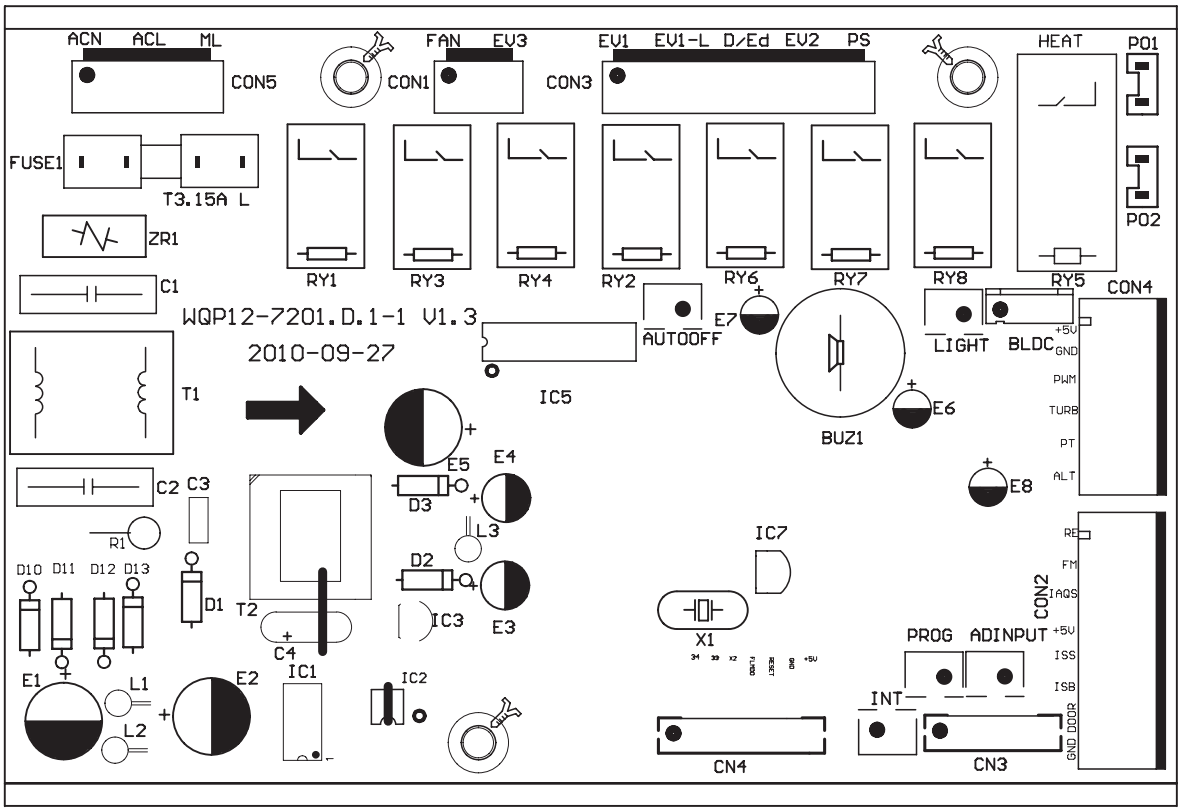




Note: For the majority of models, the PCB is located behind the control panel. The minority of models locate the PCB on the side of strengthening muscle. You can judge the location by the newest exploded view Midea sent you.

3. Disconnect the connector form PCB.
4. Remove the screws securing the PCB to control panel.
5. Remove the PCB.
6. Reverse the above procedure to install.

Map of PCB



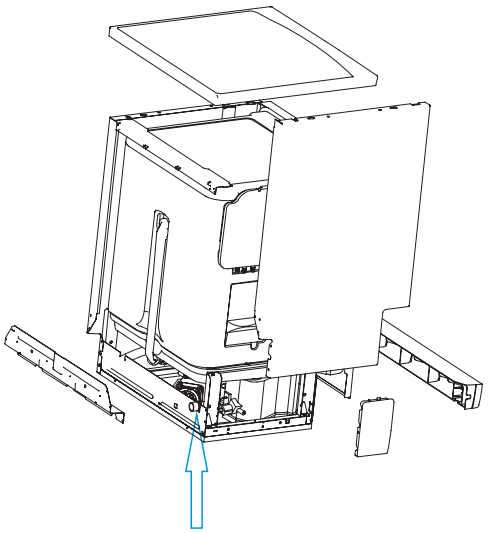
Note: This map is only applies to 7201 model.

Description

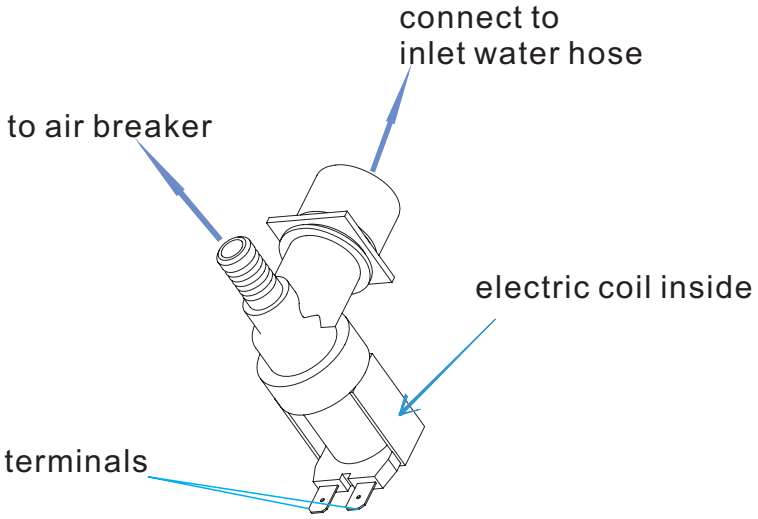
Mark	Function
HEAT	Output for Heating Element
ACL	Input of live wire
ACN	Input of bull line
IS	Input of Door Switch
EV1-L	Firewire input of inlet valve
RE	Thermister
ML	Washing Pump
PS	Drain Pump
D/ED	Dispenser
EV1	Inlet valve
EV2	Softener
EV3	Halfload Valve
ISS	Salt detect
ISB	Rinse detect
IAQS	Overflow detect
FM	Flowmeter
FAN	Fan
PO	Pressure Switch(83/63)

There is small pole's location difference between different models.
But the marks on PCB have the same meaning described on the left side.

Location of inlet valve



Appearance



The work principle

The inlet valve is electromagnetic valve that decide whether water enter or not. Valves are normally closed. Each time the appliance requires water, the controller will convey an electric signal to the coils to open the valves.
The inlet valve consist of electric coil, valve body, valve pole, filter etc.
In a word, the electromagnetic valve can act to allow water enter into machine, when it receive the order given by controller.

The defeat point

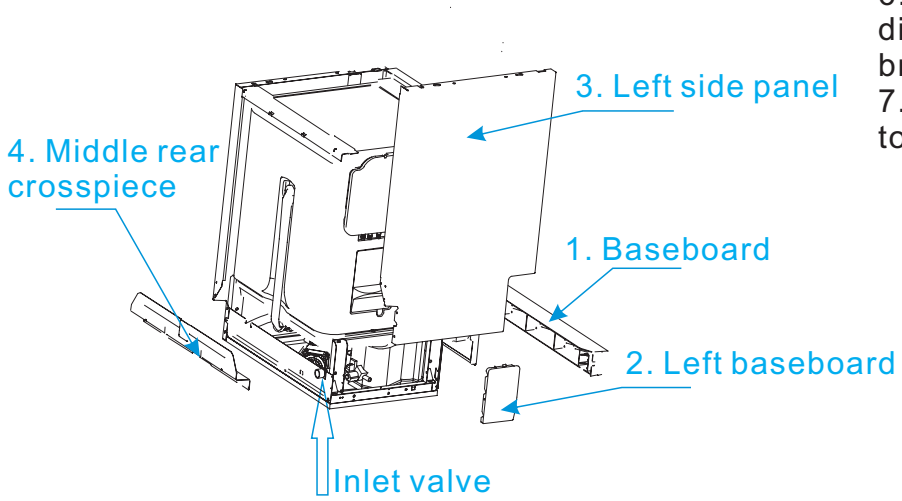
1. The valve coil is broken, so the valve can't open. It will cause the E1 error.
2. The filter is jammed, so water can't enter. It will cause the E1 error.
3. The connector is loose, so the valve can't open. It will cause the E1 error.
4. The valve pole is rusted or locked by dreg, so the valve can't open or close. It will cause the E1 or E4 error.

Technical data

Nominal voltage	220-240VAC
Frequency	50/60Hz
Resistance	Approx:4.4－4.8kΩ
Work duty	100%ED T25 3min/5min T90
Flux	2.5L/min ±15%
Power	6W
Work Pressure	0.02－1MPa

Access inlet valve

1. Disconnect power.
2. Remove the water inlet hose. (Note : Be careful of remain water drop.)
3. Remove the baseboard, left baseboard, left side panel and middle rear crosspiece.



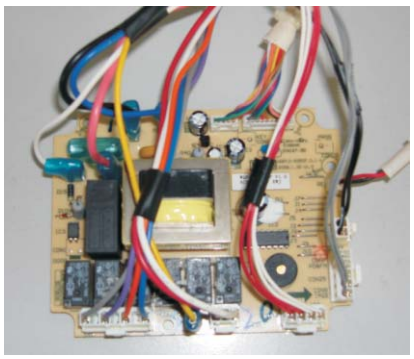
4. Disconnect the 2 terminal lugs from the inlet valve.
5. Push the valve from the lower rear crosspiece to take it off.
6. Remove the clamp and disconnect the inlet hose (to air breaker) from the water valve.
7. Reverse the above procedure to install.

Attention: Build in models have no Baseboard and left and right baseboard, but adjustable baseboard.

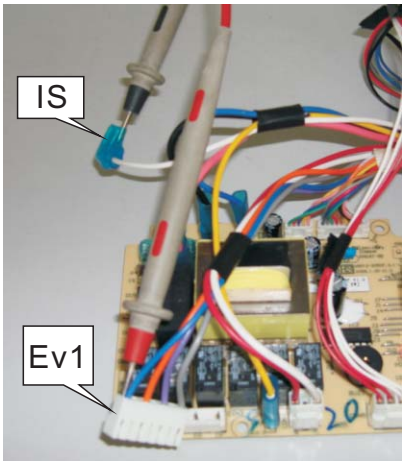
Inspect inlet valve

Check electric part

1.Open the control panel and take out the PCB;
2.Unplug the CON3 and P4 wires , then use the multi-meter Ω shelf to measure resistance between the blue wire (EV1) and white wire (IS), the normal resistance is about 4.4KΩ to 4.8KΩ.
3. I f the measured resistance is not correct, it means the valve coil is broken or the connector is loose. In this case, we should check the connection first. If the problem hasn't been solved by re-connection, we should replace the valve..
4.If the resistance is OK, we need to inspect the valve body.



unplug

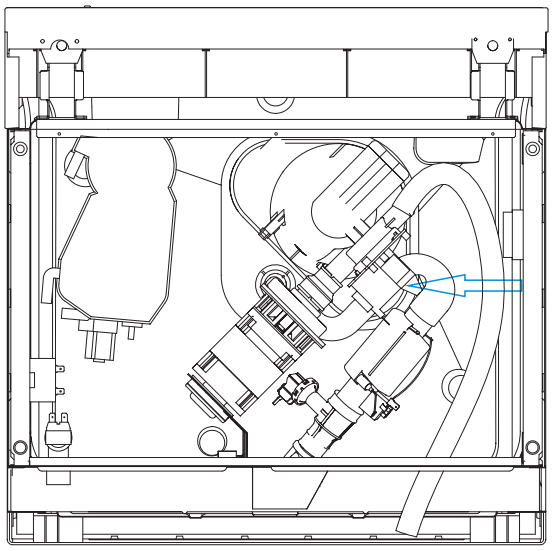


Check machine part

1. If the electric part is OK, we need to check the machine part.
2. Remove the baseboard, left baseboard, top panel, left side panel and middle rear crosspiece.
3. Check the valve filter. if the valve filter is blocked, we need clear the residues.
4. If the valve filter is clear and the valve can't inlet water, check whether valve can act or not. If it isn't , we need replace the valve.
5. If the water is continue entering, we need replace the valve.

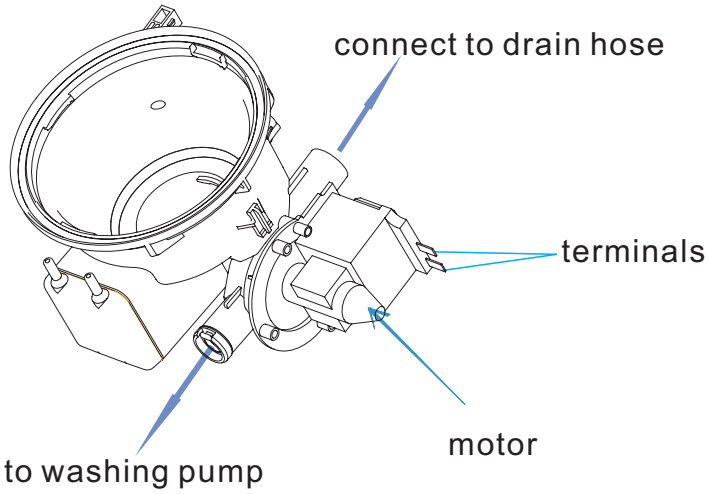
Location of Drain Pump

Bottom View



The work principle

Drain pump integrated into sump



The work principle

Drain pump consists of electrical motor, impeller, inlet and outlet.
Drain pump is a kind of pump driven by permanent magnet synchronous motor. The rotor is made with permanent magnet material, the running inertia of rotor is very small, the stator consist of silicon steel stack and coil. When the drain pump is on power, the rotor will be very easy to start.

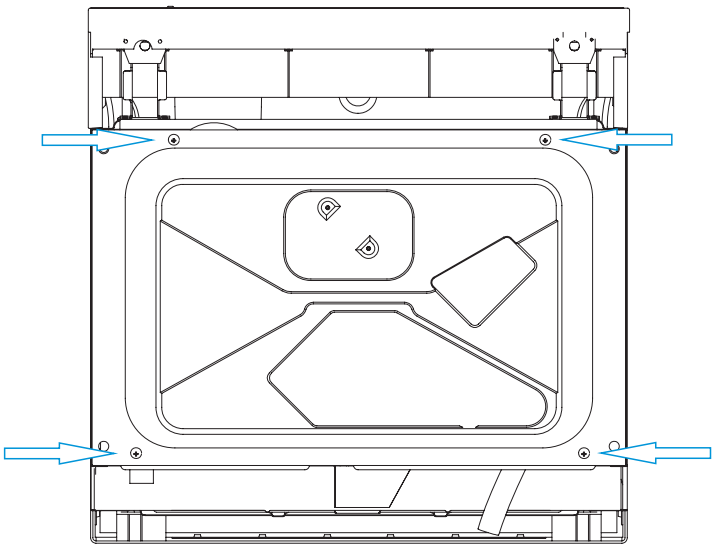
The defeat point

1. The motor coil is broken, so the drain pump can't work. It will cause the E2 , E4 or E1 error .
2. The magnetism of motor rotor is weak, so drain pump cannot work. It will cause the E2, E4 or E1 error .
3. The connector is loose, so the drain pump can't work. It will cause the E2, E4 or E1 error .
4. The rotor is locked by residues, so the drain can't work . It will cause the E2, E4 or E1 error .
5.The drain pump assembly rack is loose, it will cause noise.
6.The non-return valve is bad, the remain water is too much.
Explanatory notes: failure of drain pump may cause E1, because

Technical data

Nominal voltage	220-240VAC
Frequency	50Hz
Resistance	150 - 220Ω
Delivery height	1M
Delivery performance	≥17l/min(230VAC)

Access drain pump

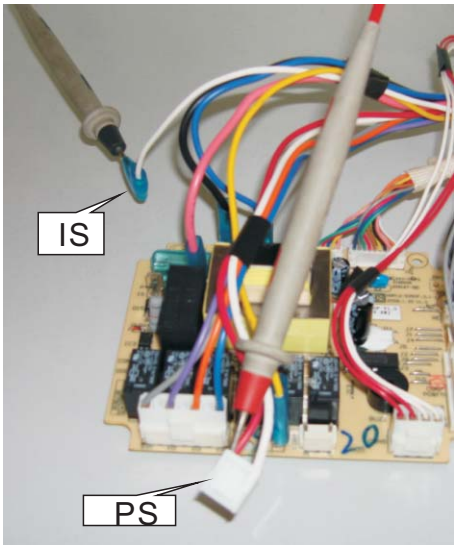


1. Drain off the water in the dishwasher, and disconnect the power supply。
(Note : Make sure to remove remained water in the dishwasher. If not, wet the floor.)
2. Remove four screws on bottom, and then remove bottom board.
3. Label and disconnect the two terminal lugs from the drain pump.
4. Remove screws securing the drain pump to sump, then remove drain pump.
5. Reverse the above procedure to install.

Inspect drain pump

Check the electric part

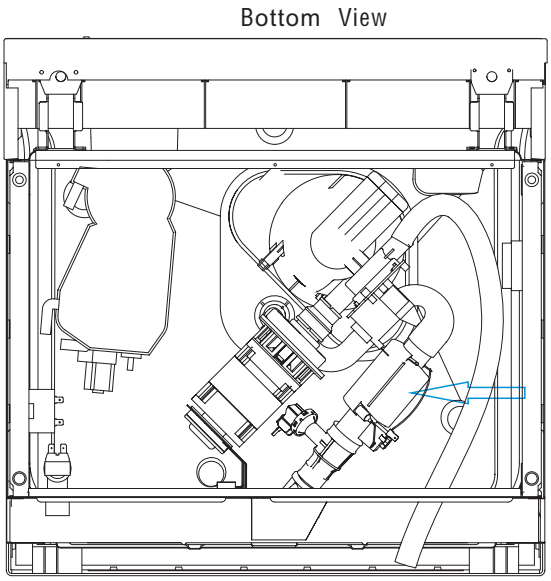
1.Open the control panel and take out the PCB;
2.Unplug the CON4 and P4 wires, then use the multi-meter Ω shelf to measure the red wire (PS) and white wire (IS), the normal resistance is about 150Ω to 220Ω.
3. If the measured resistance is not correct, it means the pump coil is broken or connector is loose. In this case, we should check the connection first. If the problem hasn't been solved by re-connection, we should replace the drain pump.
4.If the resistance is OK, but it also can't work, maybe the magnetism is too weak, so we need to replace the drain pump.



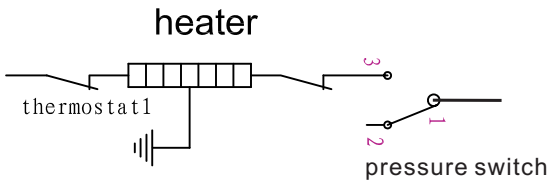
Check the machine part

1. If the electric part is OK, we need to check the machine part.
2. Remove bottom board.
3. If the non-return valve is wrongly assembled, the tub will remain much water. We need to re-assemble the non-return valve.
4. If the drain pump is working, but no water drain out or just a little. We should check the drain hose or drain body.

Location of Heater



The work principle

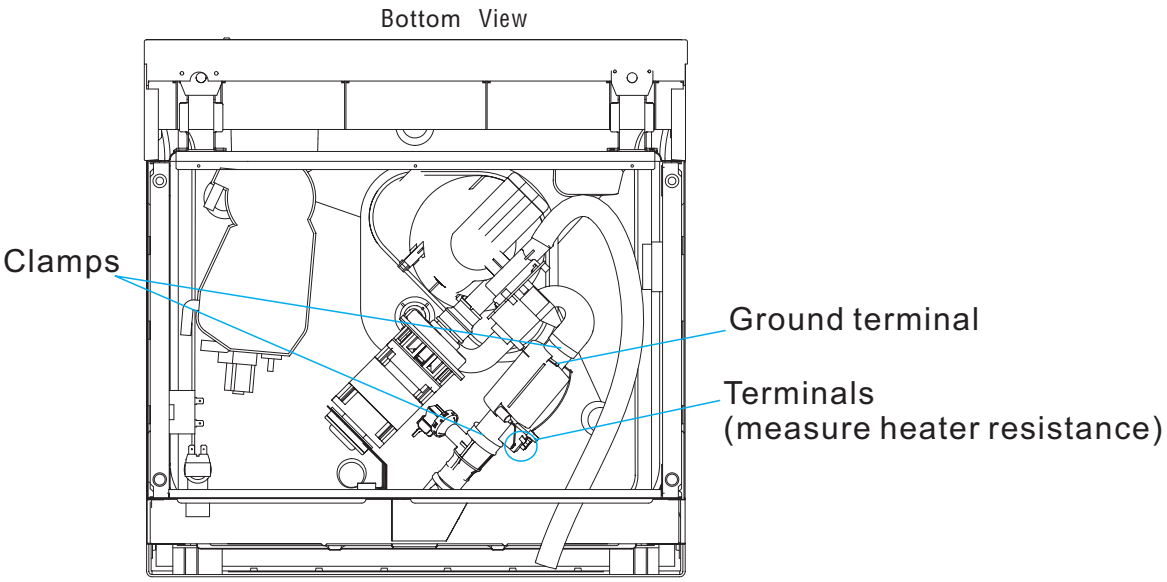


Technical data

Nominal voltage	230VAC
Rating power	1800W
Resistance	29.265±1.463Ω

The defeat point

1. The heater coil is broken, so the heater cannot work. It will cause the E3 error.
2. The thermostat is active, so the heater cannot work. It will cause the E3 error.
3. The connector is loose, so the heater cannot work. It will cause the E3 error.

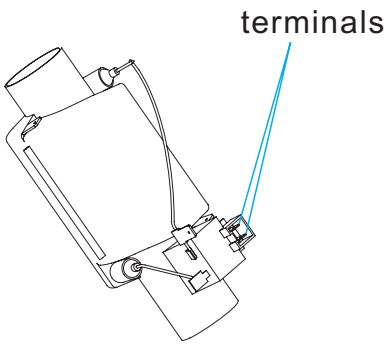


Access heater

1. Drain off the water in the dishwasher, and disconnect the power supply.
(Note : Make sure to remove remained water in the dishwasher. If not, wet the floor)
2. Remove bottom board.
3. Label and disconnect the terminals to and ground wire.
4. Remove the 2 clamps from the Heating element.
Caution: The clamp is easily damaged during removal and can't be reused. Replace the old clamp with a new universal clamp .
5. Reverse the above procedure to install.

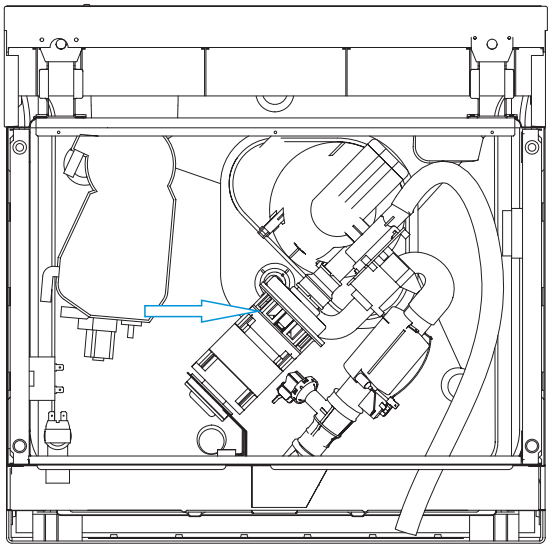
Inspect heater

1. Remove bottom board.
2. Use the multi-meter Ω shelf to measure resistance between the two terminals shown in right picture, the resistance is about 29Ω to 31Ω.
3. If the measured resistance is not correct, it means the heater coil or the thermostat is broken, we should replace the heating element or the thermostat.

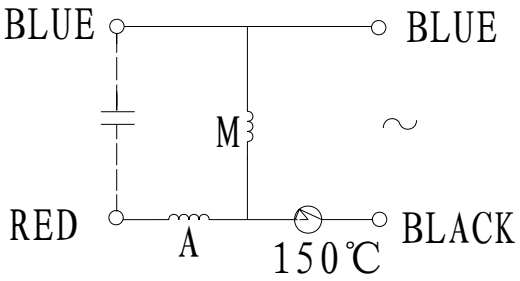


Location of Washing Pump

Bottom View



The work principle



M-main coil
A-assistant coil

Washing pump is a kind of asynchronism motor with capacitor. The stator consist of silicon steel stack and two coils, main coil and assistant coil .

The defeat point

1. The motor coil is broken, so the wash pump can't work. It will cause E3 error.
2. The motor rotor capacitor is weaken, so washing pump can't start. In this case, it will send out the electromagnetism noise. If it is continue electrifying motor, the thermal protector will work. It will cause E3 error.
3. The connector is loose, the wash pump can't work. It will cause E3 error.
4. The rotor is locked by residues, so the wash pump can't work . It will cause the E3 error.
5. The drain pump assembly bracket is loose, it will cause noise.
6. If the machine hasn't been used for long time, there is a possibility the wash pump can't starting.

Technical data

Models / Items	YXW48-2F
Nominal voltage	220-240VAC
Frequency	50Hz
Resistance	Main coil:120.40±7%Ω
	Assistant:107.10±7%Ω
Delivery height	1m(230VAC)
Power input	85W
Operating current	0.37±10%(230VAC)
Capacitor	3μF

Access Washing Pump

1. Disconnect power.
2. Remove bottom board.
3. Label and disconnect the 2 terminals to the capacitor.
4. Label and disconnect the 2 terminals to the motor wire connector.
5. Remove the clamp fastening the interconnect hose to the sump.

Caution: The clamp is easily damaged during removal and can't be reused. Replace the old clamp with a new universal clamp (Dia-31.0mm)

6. Remove the clamp fastening interconnect hose to the lower nozzle .
7. Remove the clamp fastening interconnect hose to heater.
8. Remove the screw and disconnect the ground wire from the wash pump motor assembly.

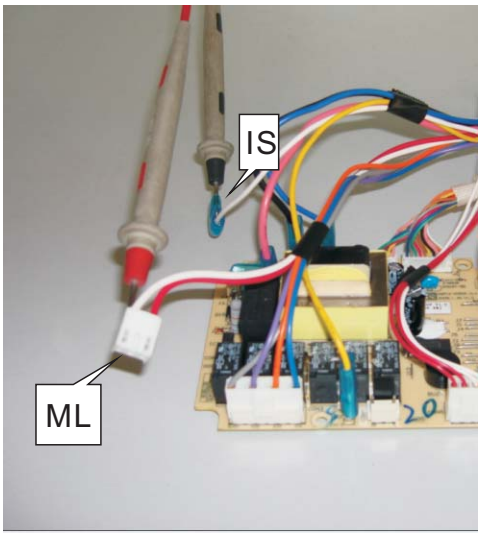
Note: Do not attempt to remove the bolt and locknut connecting the motor mount to the dishwasher frame.

9. Remove the motor pump assembly from the dishwasher.
10. Reverse the above procedure to install.

Inspect Washing Pump

Check the electric part

1.Open the control panel and take out PCB;
2.Unplug the CON4 and P4 wires, then use the multi-meter Ω shelf to test resistance between two white wire (ML and IS), the normal resistance is about 100Ω to 120 Ω.
3. I f the resistance is not correct, it means the pump coil is broken or the connector is loose, In this case, we should check the connection first. If the problem hasn't been solved by re-connection, we would replace the washing pump.
4.If the resistance is OK but it cannot work, it maybe the capacitor weakly, we need to replace the capacitor.



Check the machine part

1. If the electric part is OK, we need to check the machine part.
2. Remove bottom board.
3. Check the pump assembly, if the bracket is loose, it will bring the noise, we need to tighten it.
4. If the wash pump cannot start and the machine hasn't been used too long, maybe the seal element is bond.
5. If the drain pump is working, but no water out or just a little. We should check the vane wheel.

The work principle

The pressure switch consists of a moving diaphragm and disc which activate a change over contact. The contact can be calibrated to trip and reset at the desired pressure levels, The main application is to control the level of water in appliances. May also provide flood protection.

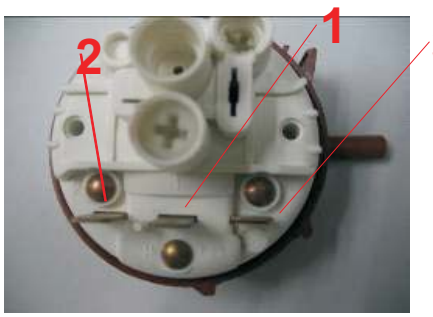
In our production, the pressure switch is to control the water level in appliance, like 83/63 serial. May also provide flood protection, like 140/120 serial.

Manufacturer : Elbi

1- COM

2 - NC

3 - NO



Front view

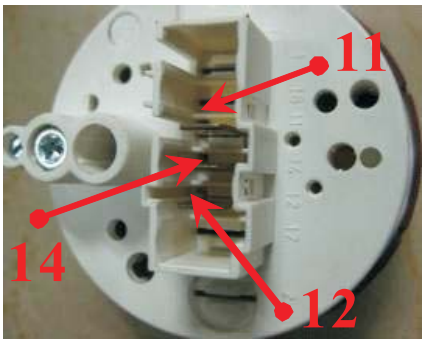
Back view

Manufacturer:EMZ

11 - COM

12 - NC

14 - NO

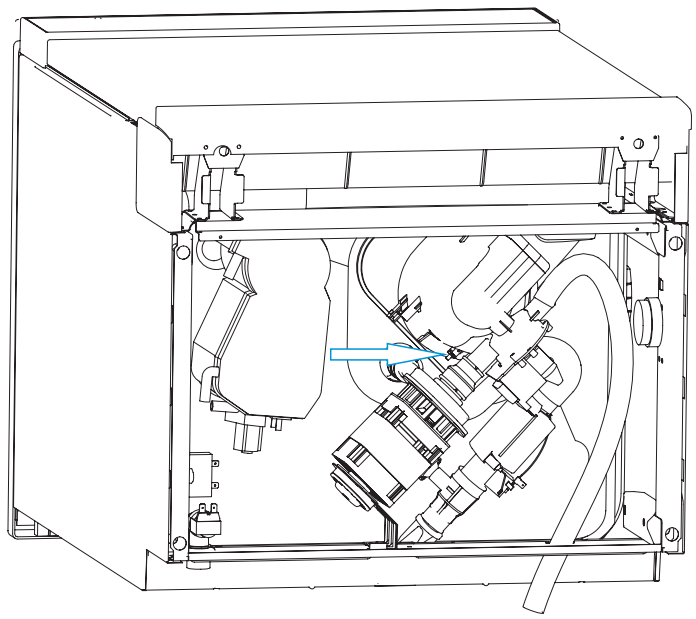


Front view

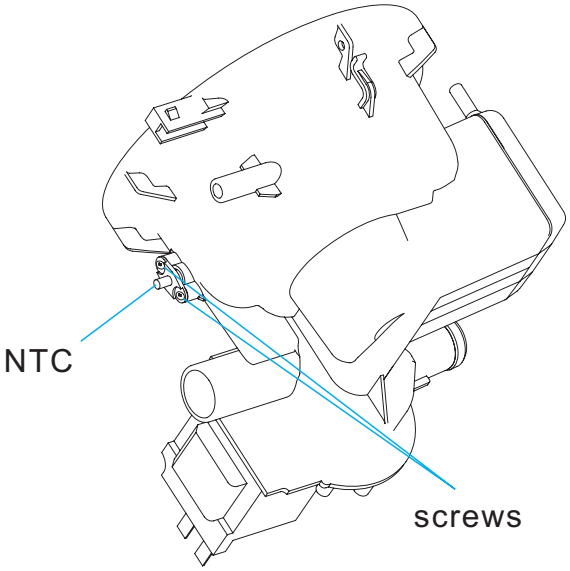
Back view

Location of NTC

Bottom View



The work principle



The work principle

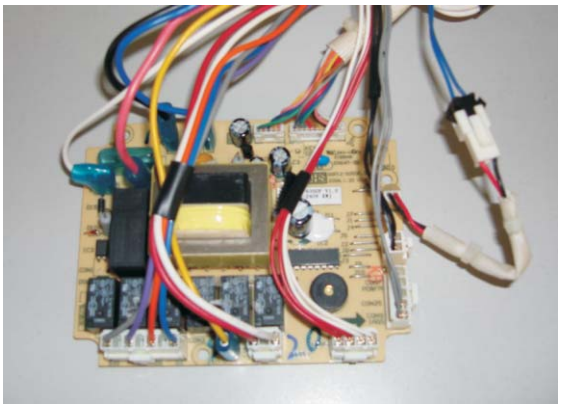
Negative Temperature Coefficient Thermistor is integrated into sump, which is used for measuring temperature of water in the tub.

Access Washing Pump

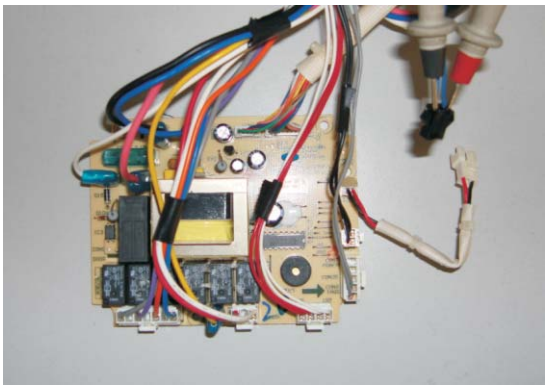
1. Remove bottom board.
2. Remove two screws securing the NTC to sump(shown in above picture).
3. Take out NTC.
4. Reverse the above procedure to install.

Inspect NTC

1.Open the control panel and take out PCB;
2.Unplug the RE connector(shown in below picture), then use the multi-meter Ω shelf to test resistance between two blue wire , the normal resistance is shown in below table.
3. I f the resistance is not correct, it means NTC circuit has a problem. In this case, we should check the connection first. If the problem hasn't been solved by re-connection, we would replace the NTC.



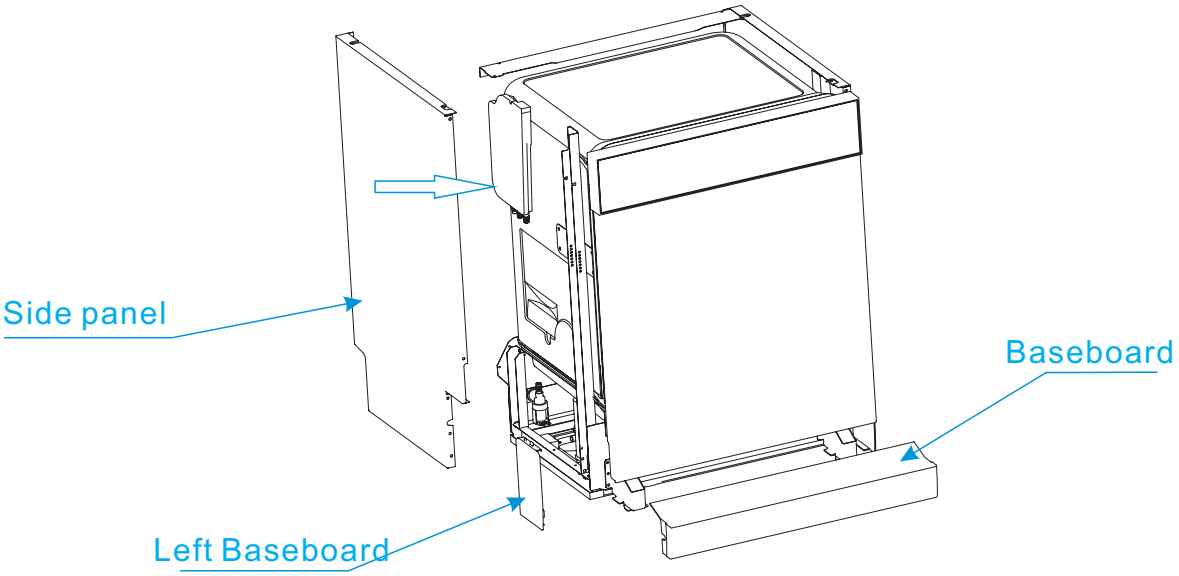
unplug



NTC resistance table

NTC	15℃	17. 48K Ω
	20℃	12. 12K Ω
	25℃	10K Ω
	30℃	8. 299K Ω
	40℃	5. 807K Ω
	50℃	4. 144K Ω
	60℃	3. 011K Ω
	70℃	2. 224K Ω
	80℃	1. 667K Ω
	85℃	1. 451K Ω

Location of Flowmeter



Attention: Build in models have no Baseboard and left and right baseboard, but adjustable baseboard.

The work principle

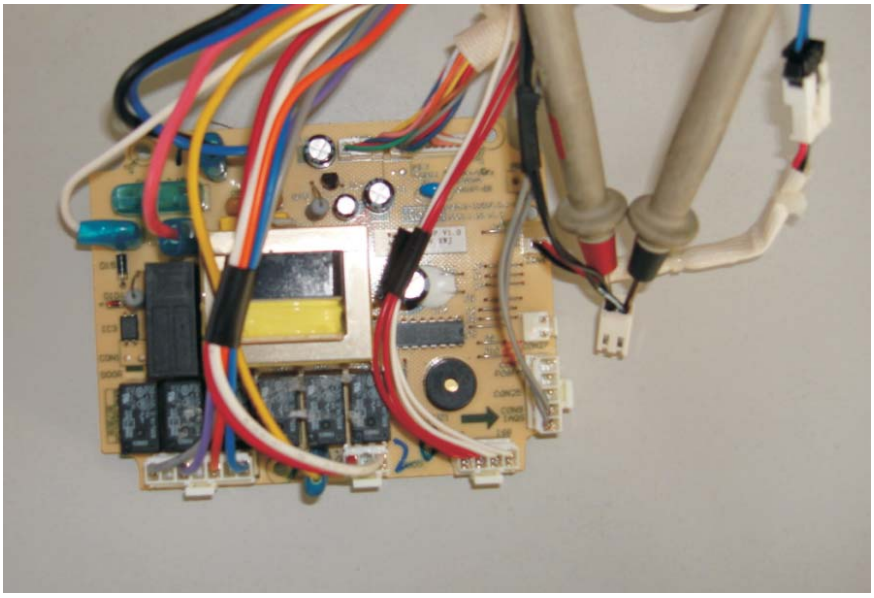
Flowmeter is integrated into Air Breaker. Function of Flowmwter is measure how much water has entered in appliance. it consists of impeller, tongue tube and terminal, etc.
When water pass through the flowmeter, moving water can rotate magnetic impeller, the tongue tube can sense the impeller's magnetic and send electronic pulses.

Access Flowmeter

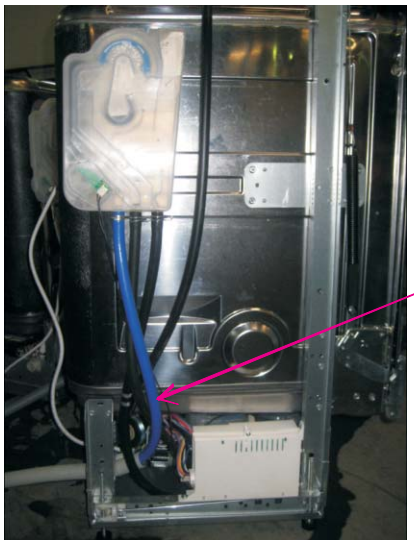
1. Remove the baseboard, left baseboard and left side panel.
2. Remove the plastic nut inside tub, which secures the air breaker to tub.(Because flowmeter is integrated into air breaker, replace air breaker if flowmeter has failure.)
3. Disconnect the wire and remove clamp fastening hose to air breaker.
4. Take out air breaker.
5. Reverse the above procedure to install.

Inspect Flowmeter

1.Open the control panel and take out PCB;
2.Unplug the CON27 wire(shown in below picture), then use the multi-meter Diode shelf to test whether electrical pulse is sent out from two black wires while water is passing through flowmeter, or not.
3. If there is continual electrical pulse, the multi-meter will send out sound “de” continually.
4.if there is no electrical pulse, the multi-meter will not send sound. In this case, it means something wrong with flowmeter circuit. We should check the connection first. If the problem hasn’t been solved by re-connection, we should replace the air breaker..



Location of Safety Hose

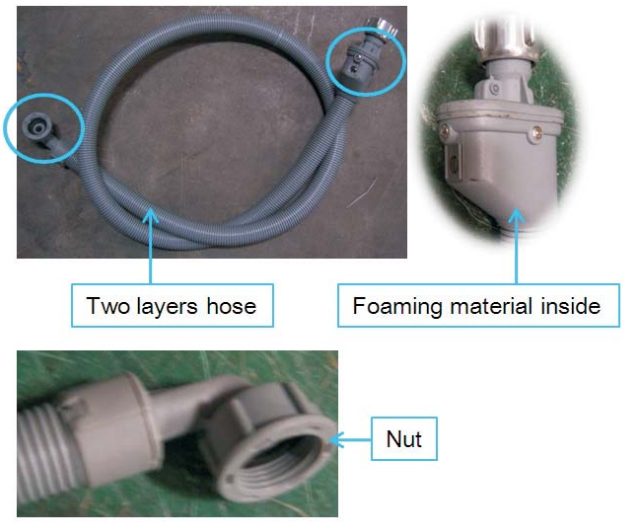


Electronic Aquastop Hose

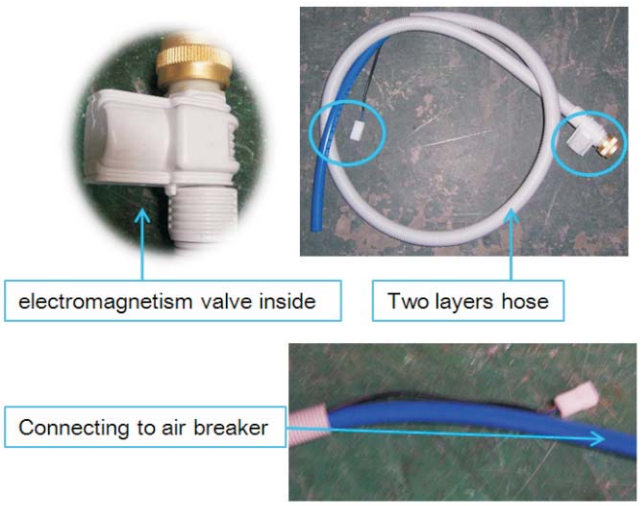
Note: The assembly mode of mechanical Aquastop hose is the same as that of universal.

The work principle

Mechanical Aquastop Hose



Electronic Aquastop Hose

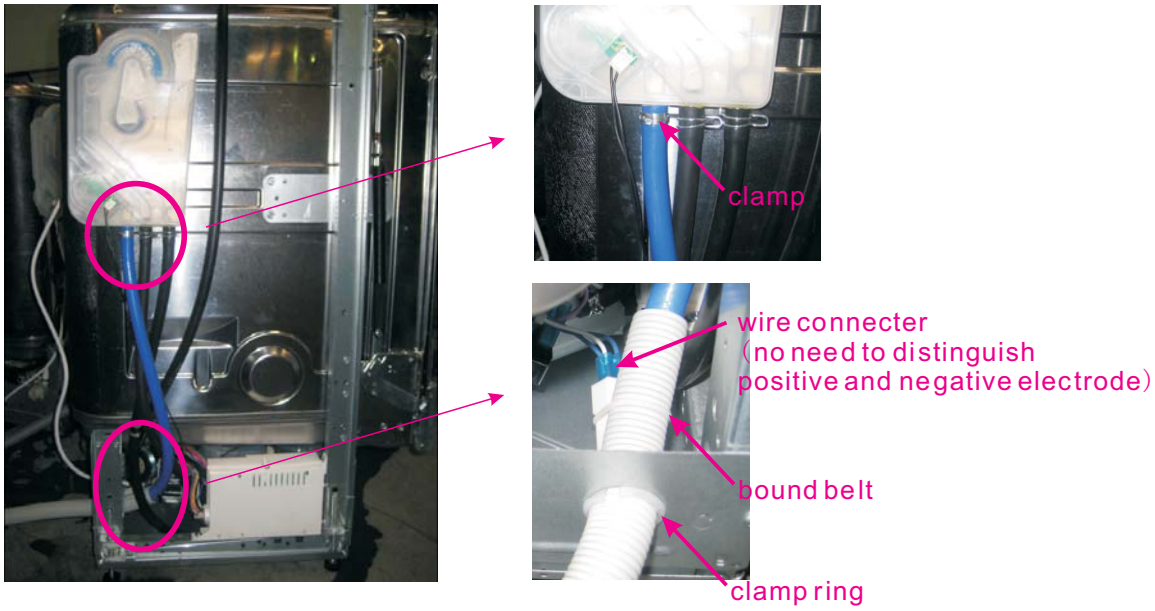


There are two types of Safety Hose, mechanical Aquastop hose and electronic Aquastop hose, which have different principles and assembly modes.

Mechanical Aquastop safety hose has two layers. If water leak and fill the air space between two layers, the foaming material will expand and lock the hose. In this situation, the machine might set off E1 alarm.

Electronic Aquastop safety hose also has two layers. But the difference from mechanical is that if the water leak and flow on the bottom tray, the flooding pressure switch on the tray will act, the electromagnetic valve on the hose will cut off the water road and the machine will set off E4 alarm.

Access Safety Hose



1. Remove baseboard, side baseboard, top panel and left side panel.
2. Remove clamp, cut the bound belt and disconnect the wire connector. Then the Inlet hose cane pulled out.
3. Reverse the above procedure to assemble.

Mechanical Aquastop Hose

Mechanical Aquastop hose is connected to appliance just as universal water inlet hose.

Inspect Safety Hose

Electronic Aquastop Hose

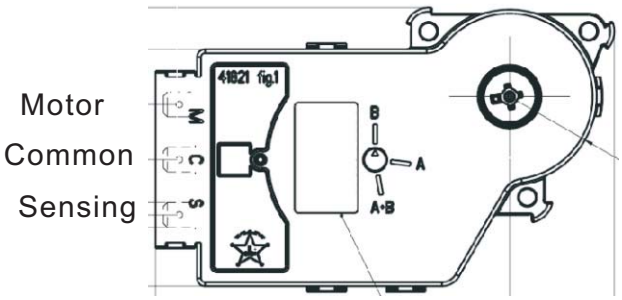
1.Open the control panel and take out the PCB;
2.Unplug the CON3 and P4 wires , then use the multi-meter Ω shelf to measure resistance between the blue wire (EV1) and white wire (IS). Open circuit and short circuit are both incorrect.
3. I f the measured resistance is not correct, it means the valve coil is broken or the connector is loose. In this case, we should check the connection first. If the problem hasn't been solved by re-connection, we should replace the safety hose.

Mechanical Aquastop Hose

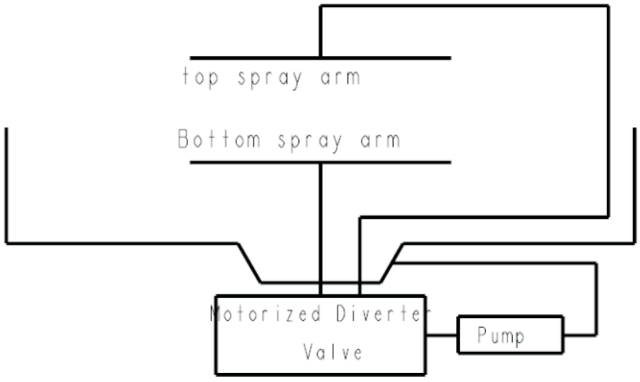
Maybe moisture absorption of foaming material in mechanical device cause a self-lock fault(can't fill the water) and this lock is non-resettable.

The work principle

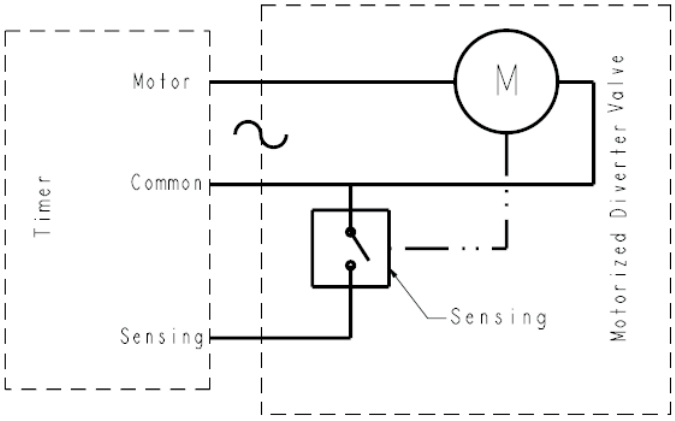
Diverter, also named alternating flow control valve, is used to control the flow of water between the upper and lower spray arms and can also be used on some models to stop the flow of water to the upper spray arm on models equiped with a half load feature.



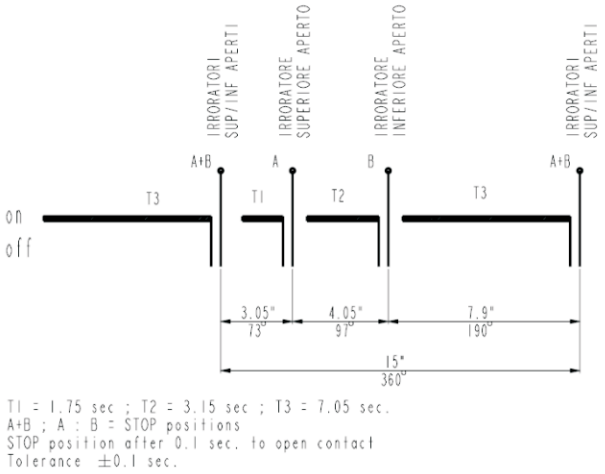
Hydraulic scheme



Electrical scheme



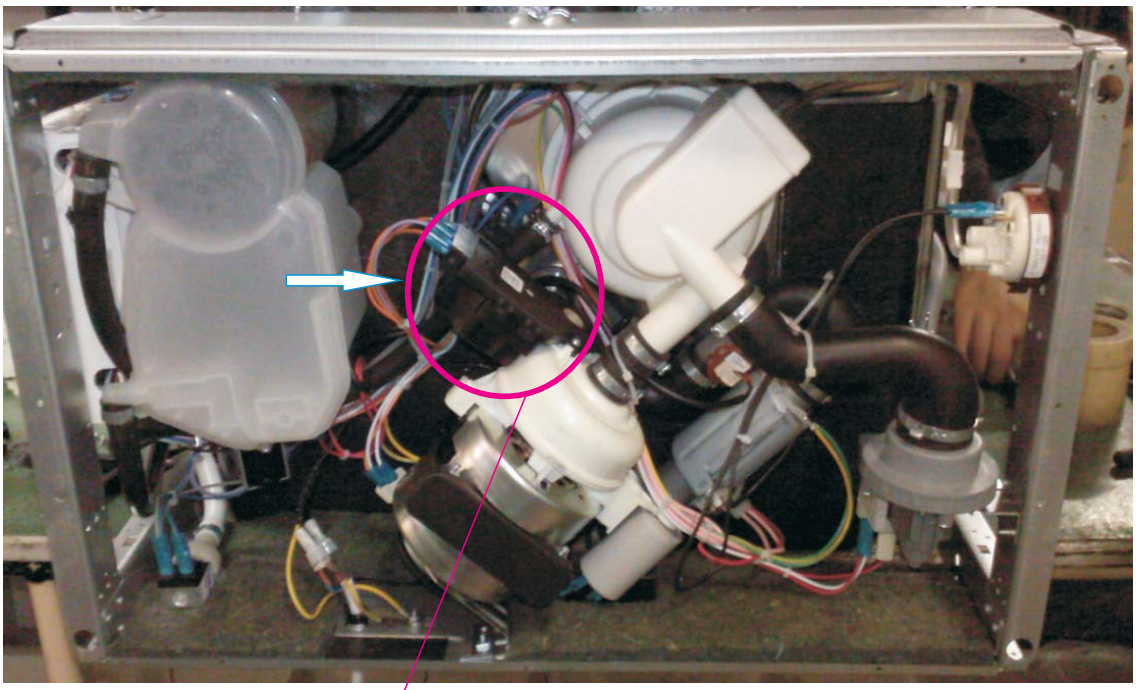
Sensing Signal



T1 = 1.75 sec ; T2 = 3.15 sec ; T3 = 7.05 sec.
A+B ; A ; B = STOP positions
STOP position after 0.1 sec. to open contact
Tolerance ±0.1 sec.

Access Diverter valve

1. Disconnect power.
2. Remove bottom board.
3. Label and disconnect the 2 terminals.
4. Remove the screws fastening the diverter valve to pump.
5. Reverse the above procedure to install.



Test Program

In order to check the operation of components of appliance and find out the malfunction, we designed this program for technician.

How to activate Test Program

	J7311A
How to start Test Program	With door opened, Program + Power
Jump into next step	Program
E1	E1
E2	/
E3	E3
E4	E4
E6	E6
E7	E7
E8	E8

To activate test program, with the door opened and machine off, hold down the Program button and press the POWER button until the machine enter into Test Program. The appliance will pause and stand by(as step 00). Then close the door and press Program button to start the Test Program.

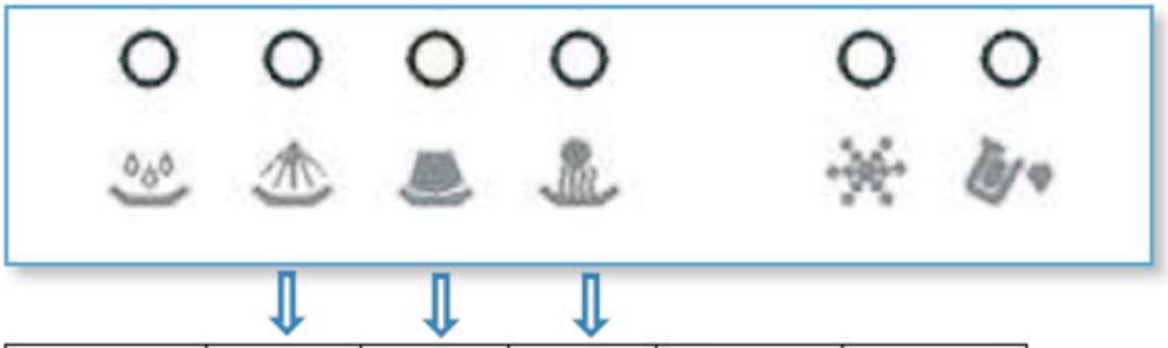
During test program running, you can press Program button to jump into next step（except inlet valve step）.

Note: The way to activate test program is slightly different between different models.

Procedure of Test Program (for models controlling water filling by flowmeter)			
No.	Display on the screen	Process	Description
0	8:88	Initialization	Power on, stand by
1	0b	Inlet Valve	Open inlet valve and feeds with 3.6L water. the divter will move to position rotating both upper and lower spray arm.
2	0A	Washing Pump and Dispenser	Dispenser will act once and washing pump will run for 60s in this step.
3	09/water temperature	Heating Element	Run washing pump and heating element until the water temperature reaches 57°C. Then the machine will pause. Two spray arm would rotate alternatively. Press Program button to jump into the next step.
4	08	Drain Pump	Drain for 30s.
5	07	Pause	Pause for 10s.
6	06	Inlet Valve	Open inlet valve and feeds with 3.2L water.
7	05	Washing Pump	Run washing pumo for 2 mins, and the diverter will be positioned in place rotating upper spray arm only.
8	04	Washing Pump	Run washing pumo for 2 mins, and the diverter will be positioned in place rotating lower spray arm only.
9	03	Washing Pump	Run washing pumo for 1 min, and the diverter will be positioned in place rotating both upper and lower spray arm.
10	02	Inlet valve and Regeneration Valve	Open regenaeration valve and feed with 0.3L water
11	01	Drain Pump	drain for 30s.
12	F*	Finish	Buzz one, then pause.

How to know which error code has occurred

To know which error code has occurred, refer to the previous table named Test Program Operation.
Take 9348 for example, If the error 1 has happened, the buzzer would alarm for 30 seconds and “E1” would be shown on display. Other error alarms would be shown in the same manner.
Take 9239D for example, if the error 7 has happened, the buzzer would alarm for 30 seconds and the Main, Rinse and Drying indicators would flash simultaneously. Other error alarms can be deduced from this.



	Main	Rinse	Drying	binary numeral	decimal numeral
error 1	0	0	1	001	1
error 2	0	1	0	010	2
error 3	0	1	1	011	3
error 4	1	0	0	100	4
error 6	1	1	0	110	6
error 7	1	1	1	111	7

The corresponding relation between indicator combination and error code shown in above figure.
Notice: the majority of models are follow this regulation, but some special models is different.

Attention

Priority level of E4 is the highest. E4 operation is valid after other error operations have done. When E4 operation has done, all the others are invalid.

In test program, E1, E2,E3, E4, E6,E7 and E8 are valid.
Note: E2 is valid for models whose water filling be controlled by pressure switch(83/63).
E8 is valid for models equipped with diverter valve(alternative washing function).

How does the appliance react when error code occurred

E1 Water filling exceed pre-set time

For the models controlling water filling by flow meter.

If the inlet valve has been opened for 4 minutes but the water quantity hasn't reached the desired value(measure by pluses), E1 would occur.
When E1 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately. At the same time, the buzzer will alarm for 30 seconds and error 1 will be shown.

For the models controlling water filling by pressure switch.

If the inlet valve has been opened for 4 minutes but the pressure switch hasn't act, E1 would occur.
When E1 occurs, the appliance will active drain pump and stop all the other components immediately. At the same time, the buzzer will alarm for 30 seconds and error 1 will be shown. Then, drain pump will run till the pressure switch reset and continue draining for 60 seconds.

E3 Heating exceed pre-set time

If the heating element has been working for 60 minutes but the water temperature detected by NTC hasn't reached desired value. E3 would occur.

When E3 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes (if the model with the pressure switch (83/63),drain pump would run till the pressure switch reset and continue draining for 60 seconds.) and all the other components will be stopped immediately. At the same time, the buzzer will alarm for 30 seconds and the error 3 will be shown.

E4 Overflow

At any time, if overflow micro-switch act and keep for longer than 2 seconds, the E4 would occur. When E4 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes (if the model with the pressure switch (83/63),drain pump would run till the pressure switch reset and continue draining for 60 seconds.) and all the other components will be stopped immediately. At the same time, the buzzer will alarm for 30 seconds and error 4 will be shown.

Note: Priority level of E4 is the highest. E4 operation is valid after other error operations have done. When E4 operation has done, all the others are invalid.

E6 Open-circuit failure of thermistor

In test program, once open-circuit failure of thermistor is detected by controller, the E6 would occur. When E6 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes (if the model with the pressure switch (83/63),drain pump would run till the pressure switch reset and continue draining for 60 seconds.) and all the other components will be stopped immediately. At the same time, the buzzer will alarm for 30 seconds and error 6 will be shown.

E7 Short-circuit failure of thermistor

In test program, once short-circuit failure of thermistor is detected by controller, the E7 would occur. When E7 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes (if the model with the pressure switch (83/63),drain pump would run till the pressure switch reset and continue draining for 60 seconds.) and all the other components will be stopped immediately. At the same time, the buzzer will alarm for 30 seconds and error 7 will be shown.

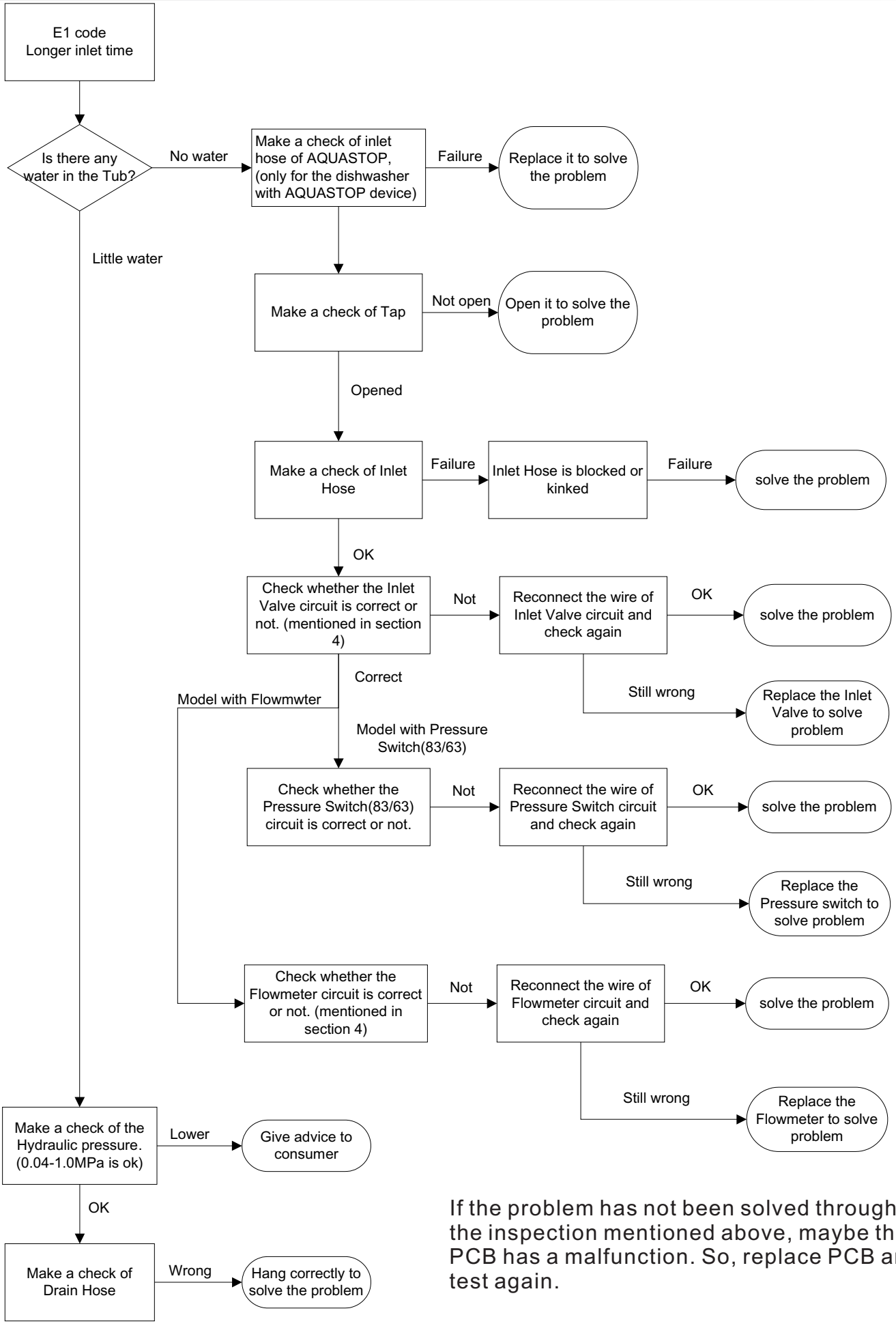
E8 Diverter valve fault

For models equipped with diverter(alternative washing function)

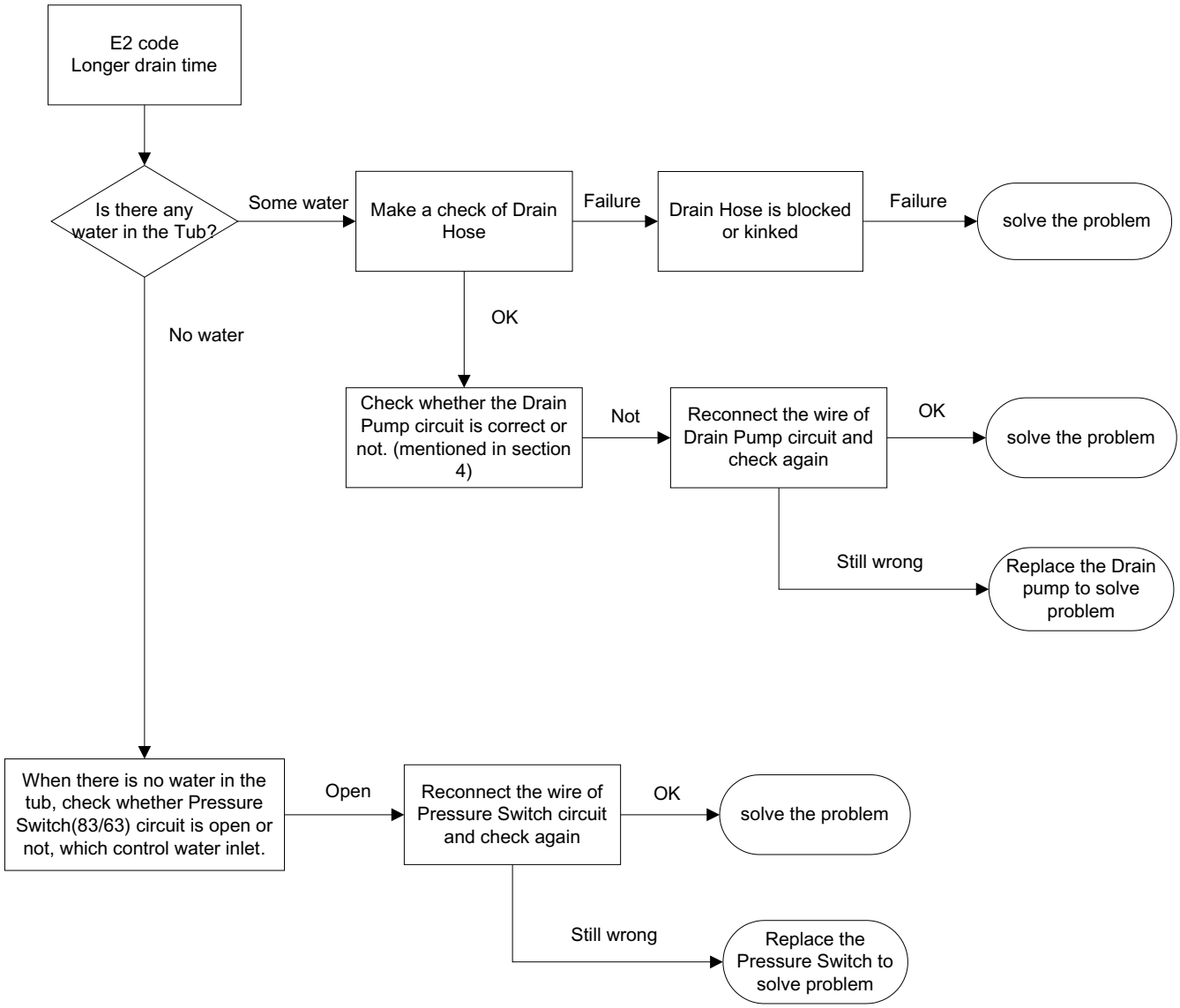
In the process of test program in which diverter valve should be act, if machine doesn't detect the feeding signal of diverter valve for 15 seconds or doesn't detect the diverter valve being positioned accurately in 60 seconds, the E8 would occur.

In the process of washing program in which diverter valve should be act, if machine doesn't detect the feeding signal of diverter valve for 15 seconds or doesn't detect the diverter valve being positioned accurately in 60 seconds, the diverter valve would stop and the E8 would be set off after ending washing program.

When E8 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately. At the same time, the buzzer will alarm for 30 seconds and the error code will be shown.


E1 code
Longer inlet time
Is there any water in the Tub?
No water
Make a check of inlet hose of AQUASTOP, (only for the dishwasher with AQUASTOP device)
Failure
Replace it to solve the problem
Little water
Make a check of Tap
Not open
Open it to solve the problem
Opened
Make a check of Inlet Hose
Failure
Inlet Hose is blocked or kinked
Failure
solve the problem
OK
Check whether the Inlet Valve circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Inlet Valve circuit and check again
OK
solve the problem
Still wrong
Replace the Inlet Valve to solve problem
Correct
Model with Flowmwter
Model with Pressure Switch(83/63)
Check whether the Pressure Switch(83/63) circuit is correct or not.
Not
Reconnect the wire of Pressure Switch circuit and check again
OK
solve the problem
Still wrong
Replace the Pressure switch to solve problem
Check whether the Flowmeter circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Flowmeter circuit and check again
OK
solve the problem
Still wrong
Replace the Flowmeter to solve problem
Make a check of the Hydraulic pressure. (0.04-1.0MPa is ok)
Lower
Give advice to consumer
OK
Make a check of Drain Hose
Wrong
Hang correctly to solve the problem

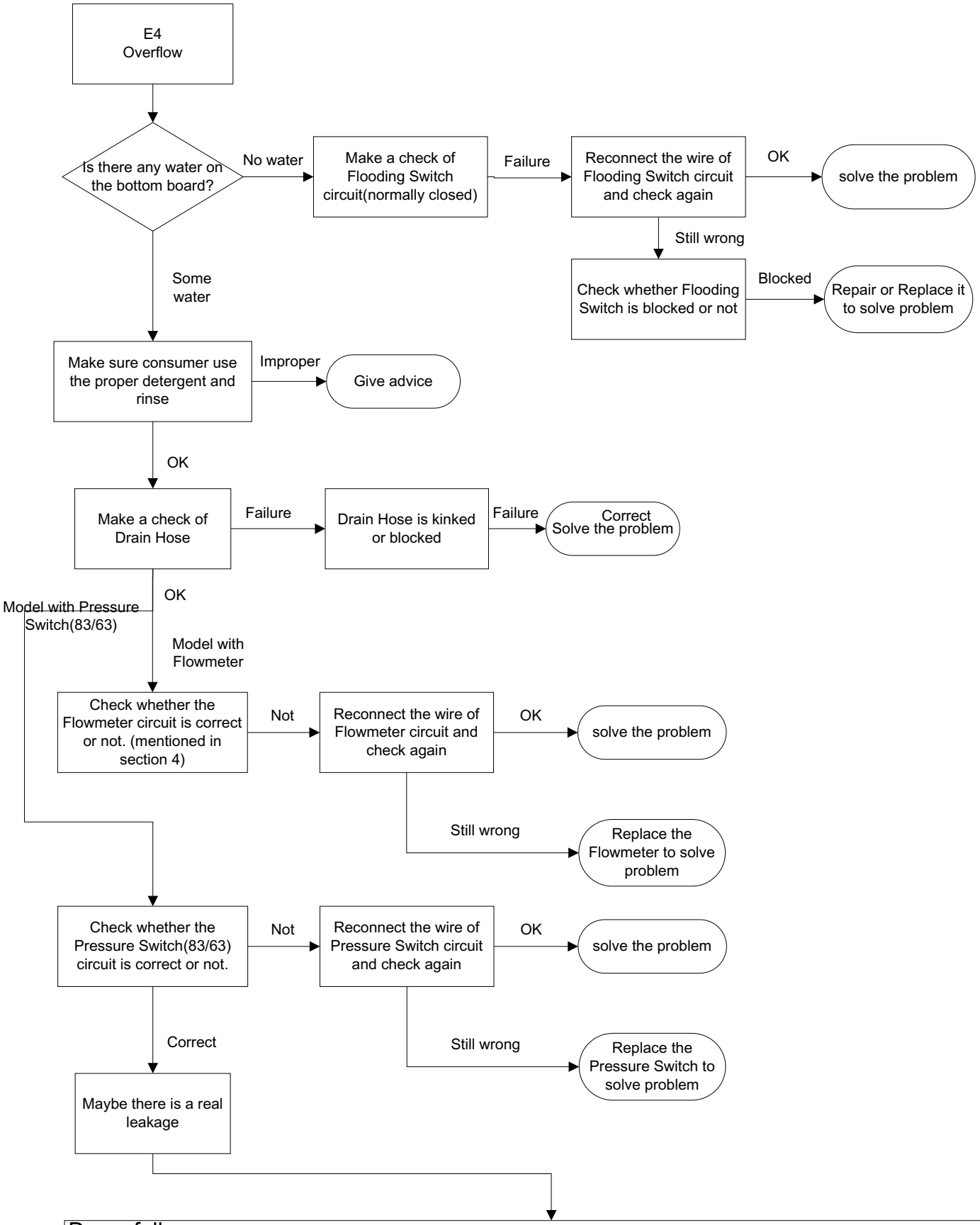
If the problem has not been solved through all the inspection mentioned above, maybe the PCB has a malfunction. So, replace PCB and test again.


E2 code
Longer drain time
Is there any water in the Tub?
Some water
Make a check of Drain Hose
Failure
Drain Hose is blocked or kinked
Failure
solve the problem
No water
OK
Check whether the Drain Pump circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Drain Pump circuit and check again
OK
solve the problem
Still wrong
Replace the Drain pump to solve problem
When there is no water in the tub, check whether Pressure Switch(83/63) circuit is open or not, which control water inlet.
Open
Reconnect the wire of Pressure Switch circuit and check again
OK
solve the problem
Still wrong
Replace the Pressure Switch to solve problem

If the problem has not been solved through all the inspection mentioned above, maybe the PCB has a malfunction. So, replace PCB and test again.

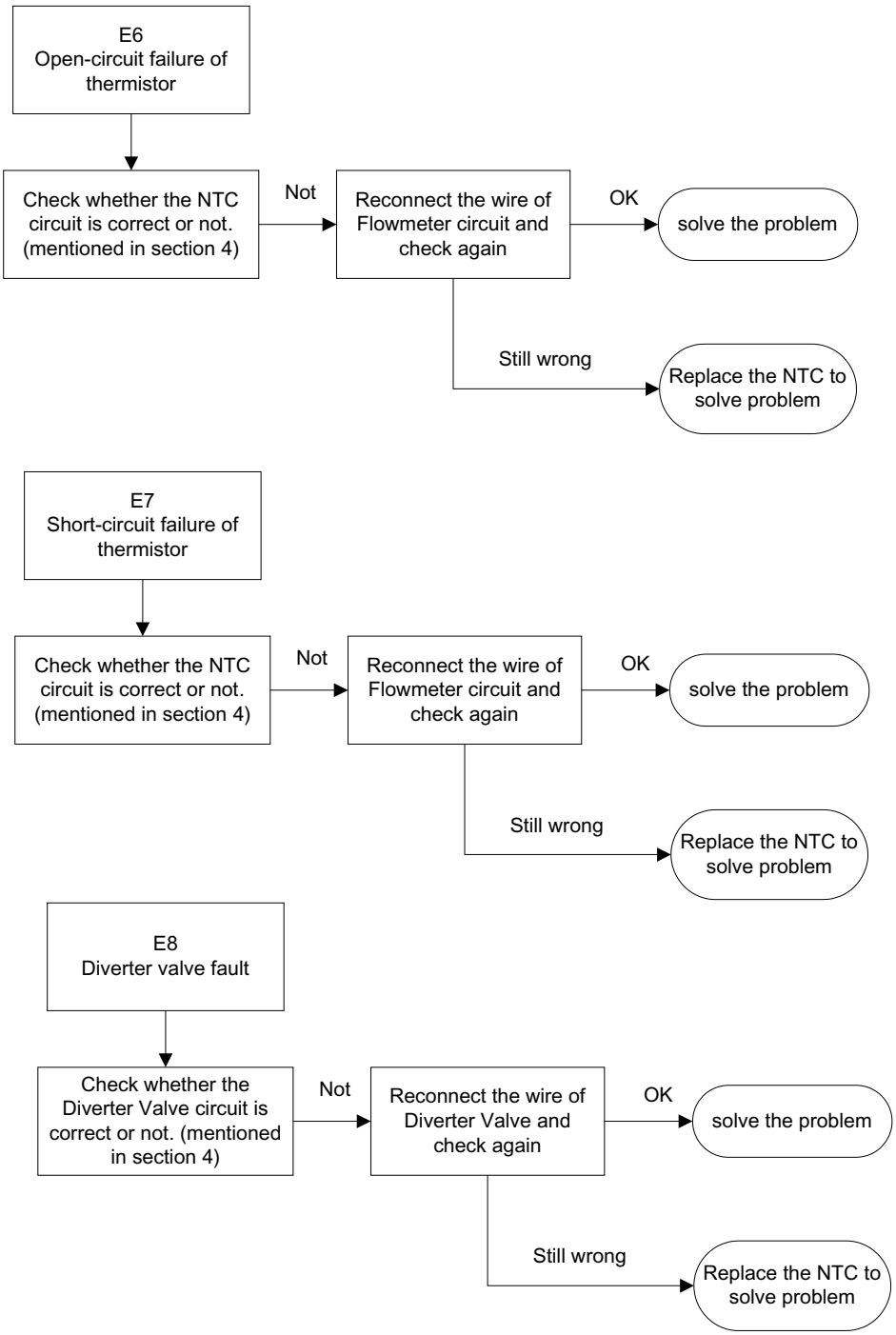
Note: This error 2 is only for models whose water filling be controlled by pressure switch(83/63).

E3
Longer heating time
Check water temperature in the tub
Low
Make a check of over heat proof heating Micro-switch.
Failure
Replace Switch to solve the problem
OK
High
Check whether the filter is jammed severely or not
Jammed
Clear or replace filter to solve the problem
OK
Make a check of Heater. (mentioned in section 4)
Failure
Reconnect the wire of Heater circuit and check again
OK
solve the problem
Still wrong
Replace the Inlet Valve to solve problem
OK
Check whether the Washing Pump circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Washing Pump circuit and check again
OK
solve the problem
Still wrong
Replace the Washing Pump to solve problem
Check whether the NTC circuit is correct or not.(mentioned in section 4)
Not
Reconnect the wire of NTC circuit and check again
OK
solve the problem
Still wrong
Replace the NTC to solve problem


E4
Overflow
Is there any water on the bottom board?
No water
Make a check of Flooding Switch circuit(normally closed)
Failure
Reconnect the wire of Flooding Switch circuit and check again
OK
solve the problem
Still wrong
Check whether Flooding Switch is blocked or not
Blocked
Repair or Replace it to solve problem
Some water
Make sure consumer use the proper detergent and rinse
Improper
Give advice
OK
Make a check of Drain Hose
Failure
Drain Hose is kinked or blocked
Failure
Correct
Solve the problem
OK
Model with Pressure Switch(83/63)
Model with Flowmeter
Check whether the Flowmeter circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Flowmeter circuit and check again
OK
solve the problem
Still wrong
Replace the Flowmeter to solve problem
Check whether the Pressure Switch(83/63) circuit is correct or not.
Not
Reconnect the wire of Pressure Switch circuit and check again
OK
solve the problem
Correct
Still wrong
Replace the Pressure Switch to solve problem
Maybe there is a real leakage

Do as follows

Remove two side panels
Remove the water from the bottom board and make sure there is no water at the bottom board.
Restart the dishwasher with a strong or standard wash program as a leakage could easily repeat at a higher temperature and after a long period of running time.
Observe the bottom tray every twenty minutes.
If any water appears, you will found out which areas, such as motor, drain pump, sump, softener, and hoses between them, and also clips at the end of each hose, besides the weld seam at the bottom of the tub.
If hours passed, but no water comes out, you should stop the dishwasher with sufficient water in the inner tub, and observe it again after leaving it alone for one to two hours.


E6
Open-circuit failure of thermistor
Check whether the NTC circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Flowmeter circuit and check again
OK
solve the problem
Still wrong
Replace the NTC to solve problem
E7
Short-circuit failure of thermistor
Check whether the NTC circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Flowmeter circuit and check again
OK
solve the problem
Still wrong
Replace the NTC to solve problem
E8
Diverter valve fault
Check whether the Diverter Valve circuit is correct or not. (mentioned in section 4)
Not
Reconnect the wire of Diverter Valve and check again
OK
solve the problem
Still wrong
Replace the NTC to solve problem

If the problem has not been solved through all the inspection mentioned above, maybe the PCB has a malfunction. So, replace PCB and test again.

Caution:

Because the real situation is unpredictable, inspection trees mentioned in this manual are for reference only.

symptom	possible reason	analysis	operation	remedy
E1 longer inlet time	check the AQUA STOP hose	defective AQUA STOP hose might cut off the water inlet route	for mechanical AQUA STOP hose, check whether the mechanical device is lock or not	replace the hose
			for electronic AQUA STOP hose, check whether the valve circuit is ok or not	reconnect or replace the hose
	check the water supply	the tap isn't open	check whether the tap open or not	give advice
		lower hydraulic pressure	make sure the hygraulic pressure in the range from 0.04 to 1.0 Mpa	give advice
	check the inlet	inlet hose is blocked or kinked	unblock or unkink	unblock or unkink
	check the inlet valve	loosing connection or defective inlet valve might cause the E1 alarm	check the circuit of inlet valve	reconnect or replace the valve
	check the flowmeter	for models with flowmeter, defective flowmeter might cause the E1 alarm	check the circuit of flowmeter	reconnect or replace flowmeter
	check the pressure switch (83/63)	for models controlling water filling by pressure switch, defective pressure switch might cause the E1 alarm	check the circuit of pressure switch	reconnect or replace the pressure swtich
	check the drain	wrong installation of drain hose might cause water siphon out	make sure it is intalled properly.(refer to instruction manual)	reinstall drain hose
	check the pressure switch (140/120)	defective pressure switch might cause the drain pump always run	listen the sound to check whether the drain pump is run or not	replace the pressure switch (140/120)
	check the PCB	defective PCB might cause the E1 alarm	When you have eliminated other possible causes, maybe there is something wrong with PCB	reconnect or replace PCB
E2 longer drain time	check the drain hose	blocked hose	unblock the hose	unblock the hose
	check the drain pump	defective drain pump	check the circuit of drain pump	reconnect or replace the drain pump
	check the pressure switch (83/63)	if there is no water in the tub and appliance still ste off E2 alarm, the possible reason is defective pressure switch	check the circuit of pressure switch	reconnect or replace the pressure switch

	check the PCB	defective PCB might cause E2 alarm	When you have eliminated other possible causes, maybe there is something wrong with PCB	reconnect or replace PCB
E3 heating fault	check filter	severely jammed filter might cause E3 alarm, so give advice to end customer on clean regularly the interior of dishwahser.	Advice: Even though a dishwasher is constantly being pounded with water and soap, it needs an occasional cleaning. Food particles, hard water deposits, mildew, mold and bacteria can and do build up along the surfaces and in the crevices of a dishwasher. Cleaning a dishwasher regularly will keep it functioning properly, keep your family healthy and safe, and keep your dishes coming out sparkling	clean the filter and give advice
	check the hydraulic pressure	low hydraulic pressure might cause the less filling water	make sure the hygraulic pressure in the range from 0.04 to 1.0 Mpa.	give advice
	check the drain hose	wrong installation of drain hose might cause water siphon out	make sure it is intalled properly.(refer to instruction manual)	reinstall drain hose
	check washing pump	washing pump doesn't running might cause E3 alarm	listen to the sound of appliance to see whether washing pump run or not. Defective motor might cause the washing	replace the washing pump
			measure the capacitance of starting capacitor. Capacitor attenuation could casue the motor cann't start	replace the capacitor
	check heater and NTC	malfunction of heater or NTC might cause E3 alarm	measure temperature of water in tub continuously when test program is running to see whether temperature increasing (aproximate 2 ℃/min) is normal and the applaince pause when the water temperature reach 60 degreee or not.	replace the defective component
	check anti-drying pressure switch	abnormal anti-drying pressure switch might cause E3 alarm	if haven't find the problem after checking the components mentioned above, it is most possible reason that anti-drying pressure switch is abnormal.	replace the anti-drying pressure switch
	check PCB	defective PCB also might cause E3 alarm, but its probability is small.	So, When you have eliminated other possible causes, you can try to change PCB to see if the problem be solved.	reconnect or replace PCB
	check the use of detergent	too much detergent used during the wash cycle could cause the water foams up and overflow on the bottom	give advice to end customer advice on use the amount of detergent used during the wash cycle according to instruction manual	give advice

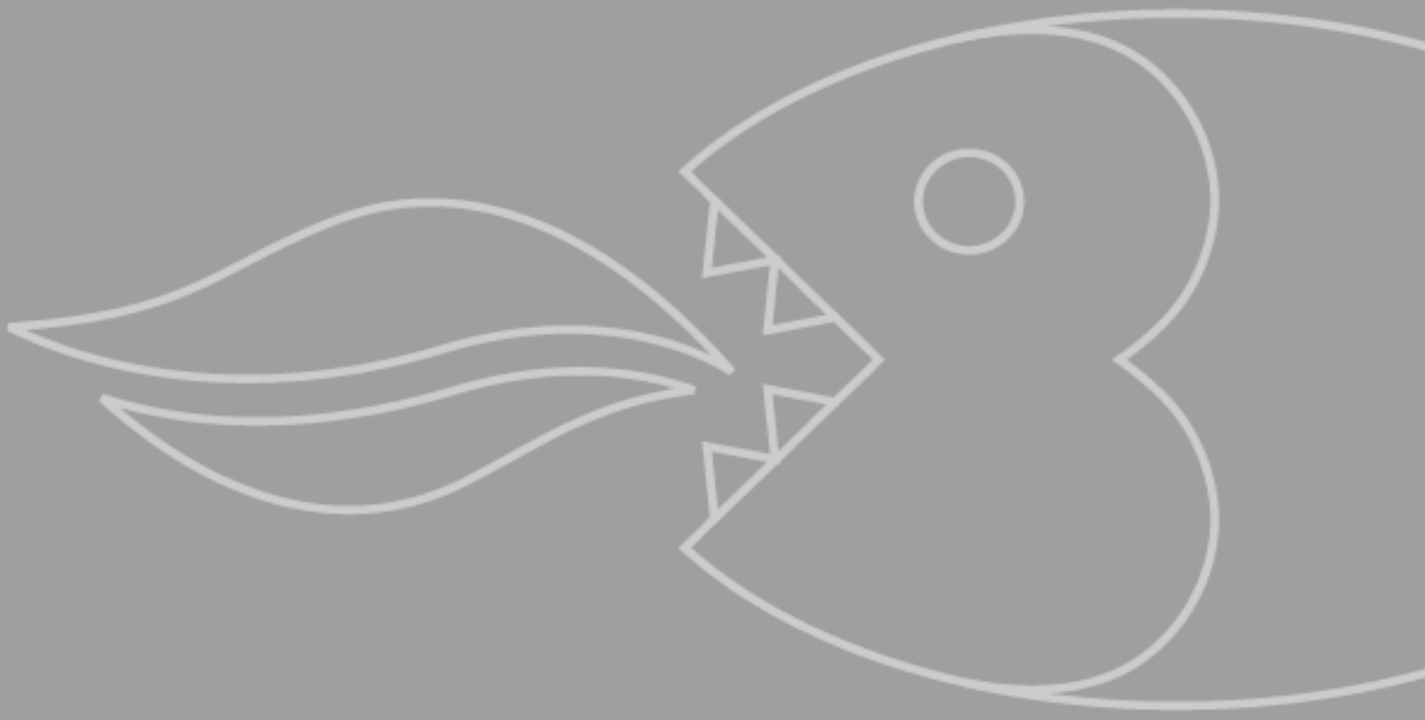
E4 overflow	chech whether the applaince is level	if apliance is not level, it might cause the E4 alarm	make sure the appliance is level	level appliance
	check the drain pump	defective drain pump might cause the E4 alarm	the first step of all the washing program is drain, which could be used to test whether drain pump work noramlly or not	replace the drain pump
	check the amount of filling water	too much filling water could make a overflow	for models controlling water filling by pressure switch(83/63), run test program and check whether the amount of filling water is normal or not.	repalce the pressure switch(83/63)
			for models controlling water filling by flowmeter, run test program and check whether the amount of filling water is	replace the flowmeter
	check the float microswitch	sticking float microswitch could cause the E4 alarm	disassemble the bottom tray and check whether the float microswitch moves freely up and down	repair or replace the float microswitch
	find where leakage is	if there is a real leakage, finding where leakage is and solving the problem would be	to find and solve problem, do as suggestion mentioned in service manual	repair or replace the defective component
E6 & E7 open-circuit & short-circuit	check the NTC	if the appliance detect the malfunction of NTC themistor, E6 or E7 would be set off	check the NTC circuit and measure the resistance of NTC thermistor	reconnect or replace the NTC thermistor
	check the PCB	if the NTC thermistor is ok, but the alarm still be set off, the PCB might have defect	change the PCB to see if the appliance is run normally	reconnect or replace PCB
	check the loading	improper loading could block the spray arm, so give advice to end customer on how to load dishes and silverware peoperly.	following the advice on how to load mentioned in instruction manual, which is the necessary condition of getting good washing performance	give advice
	check filter	severely jammed filter might cause E3 alarm, so give advice to end customer on clean regularly the interior of dishwahser.	Advice: Even though a dishwasher is constantly being pounded with water and soap, it needs an occasional cleaning. Food particles, hard water deposits, mildew, mold and bacteria can and do build up along the surfaces and in the crevices of a dishwasher. Cleaning a dishwasher regularly will keep it functioning properly, keep your family healthy and safe, and keep your dishes coming out sparkling	clean the filter and give advice
	check the using program	improper program might cause poor performance		

poor washing performance	check the use of deterhent and rinse	improper amount of detergent and rinse aid and poor quality detergent and rinse aid might cause poor performance	refer to instruction manual	give advice
	check the setting of salt consumption	improper salt consumption might cause the poor perpormance	Observe whether there are water spots or white film on washed dishes and glass which caused by hard water mineral. If water is too hard, there is a need to adjust salt consumption to adopt to the situation.(refer to instruction	adjust salt consumption
	check dispenser	malfunction of dispenser might cause the poor performance	Run the test program to see whether dispenser open normally.	replace the dispenser
	check the water level	less water might cause the poor performance	make sure the aplliance is level	level appliance
			wrong installation of drain hose might cause water siphon out, so make sure it is intalled properly.(refer to instruction	reinstall drain hose
			low hydraulic pressure might cause the less filling water, so make sure the hygraulic pressure in the range from 0.04 to	give advice
			for models controlling water filling by flowmeter, defective flowmeter might cause less filling water. When you have eliminated other causes of less water, you could roughly judge the flowmeter is something wrong.	replace flowmeter
			for models controlling water filling by pressure switch(83/63), defective pressure switch might cause less filling water. When you have eliminated other causes of less water, you could roughly judge the pressure switch is something wrong.	replace pressure switch
			defective PCB also might cause less filling water, but its probability is small. So, the last choose is replace PCB.	replace PCB
	check heater and NTC	malfunction of heater or NTC might cause E3 alarm	measure temperature of water in tub continuously when test program is running to see whether temperature increasing (aproximate 2 ℃/min) is normal and the applaince pause when the water temperature reach 60 degreee or not.	replace the defective component
	check washing pump	washing pump not running	listen to the sound of appliance to see whether washing pump run or not	replace the washing pump

poor drying performance	check loading	improper loading might cause water remains on the dishes. Make sure tilt the dishes and load the glass bottom-side-up.	following the advice on how to load mentioned in instruction manual, which is the necessary condition of getting good drying performance	give advice
	check the using program	improper program might cause poor performance	refer to instruction manual	give advice
	check rinse aid dispenser	Rinse aid is formulated to ensure that food and chemical residues are not redeposited on your dishes during the final rinse cycle and dishwasher get expected drying performacne. Malfunction of dispenser might cause the rinse	make sure the rinse aid container is not empty and rinse aid is normally release in the cycle.	fill rinse aid or replace dispenser
	-	get better drying performance	The air drying process can be speeded up if you open the dishwasher just after it is finished and the dishes are still hot. This will allow the moist air to leave the dishwasher as the dishes cool and dry.	give advice
noise	check whether the noise is noraml	some audible sound are noraml	-	give advice
	check the loading	dishes are not secure in the rack or something small has dropped	ensure everything is secured in the dishwasher	reload and give advice
	check the washing pump	malfunction of washing pump might make a abnormal noise	chech the washing motor whether run normally	replace washing pump
	check the drain pump	blocked or defective drain pump might make a abnormal noise	chech the drain motor whether run correctly	replace drain pump

BDWI640 60 cm Fully integrated full height dishwasher

INSTRUCTION MANUAL



Baumatic®

USER MANUAL FOR YOUR BAUMATIC

BDWI640 60 cm Fully integrated full height dishwasher

Baumatic®

NOTE: ***This User Instruction Manual contains important information, including safety & installation points, which will enable you to get the most out of your appliance. Please keep it in a safe place so that it is easily available for future reference; for you or any person not familiar with the operation of the appliance.***

GS 24/01/13

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ENVIRONMENTAL NOTE

Note: ***Before discarding an old appliance, switch off and disconnect it from the power supply. Cut off and render any plug useless. Cut the cable off directly behind the appliance to prevent misuse. This should be undertaken by a competent person. Disable the door lock to make sure that children cannot get stuck inside the appliance.***

This appliance is marked according to the European directive 2002/96/EC on Waste electrical and Electronic Equipment (WEEE). By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol **on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.**

Disposal must be carried out in accordance with local environmental regulations for waste disposal.
For more detailed information about treatment, recovery and recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

- The packaging materials that Baumatic uses are environmentally friendly and can be recycled.

- Please discard all packaging material with due regard for the environment.

IMPORTANT SAFETY INFORMATION

Your safety is of the utmost inmportance to Baumatic. Please make sure that you read this instruction booklet ***before*** attempting to install or use the appliance. If you are unsure of any of the information contained in this booklet, please contact the Baumatic Advice Line.

General Safety

- Repairs to your appliance must only be carried out by a Baumatic engineer or one of its authorised service agents. Any attempt by an inexperienced person to repair the appliance, could result in injury or damage to your dishwasher.

- If you notice that the mains cable in damaged. ***The appliance must not be used***. The same applies if you notice that the worktop, control panel or base area is damaged. As this could allow access to the internal components of the machine.

- The appliance should be turned off and isolated from the mains supply, before either cleaning or maintenance work is attempted.

- The mains cable must not be used to pull the plug out of the electrical socket.

- The machine should not be sprayed with water.

- The external surface of the appliance may become hot whilst your dishwasher is in use.

- It is possible for small animals to chew either mains cables or water hoses, which could cause an electric shock hazard.

Installation

- The installation instructions contained within this user manual should be followed.

- It is obligatory for the completed installation to comply with all relevant building regulations and local water authority requirements.

- ***Before the first use of the appliance, you should follow the steps listed in the "Before first use" section on page 11 and page 43 of this manual.***

- Care should be taken not to trap the power supply cable underneath the appliance whilst installing it.

- No attempt should be made to alter or modify the specifications of this appliance.

In daily use

- This appliance is only designed to wash normal domestic washloads. If you use your dishwasher in any other way or it is incorrectly used, then Baumatic accepts no liability for any damage that might be caused and any guarantee will be void.

- It is recommended that the appliance is unplugged and the water supply is turned off after the machine is used.

- The detergents, rinse aid and salt that you place in this appliance should be suitable for automatic dishwashers. With regards to dosage levels, the detergent manufacturer's recommendations should be followed.

- Sharp knives or ones with long blades are a potential safety hazard when placed in an upright position in the cutlery basket. We would recommend that these items are placed horizontally in the upper basket.

- ***You should not*** wash any items that have come into contact with corrosive, acidic or alkaline chemicals, paint, petrol, iron or steel debris.

- ***You should not*** open the door whilst the appliance is set on a wash program. Depending on which stage that the wash program is at, hot water could escape the machine.

- ***You should not*** leave the door of the appliance open, unless you are loading or unloading the dishwasher.

- ***You should not*** stand or sit on the door when it is open.

Child Safety

- Your dishwasher should only be used by adults. You should not allow children in the area of the machine unsupervised. You should not let them touch the controls or play with the appliance.

- It could be possible for a child or pet to gain access to the dishwasher if the door is left open. Therefore please check the inside of the appliance before setting it on a wash cycle.

- Any packaging that is removed from the machine should be kept away from children.

- All detergents should be kept out of children's reach in a safe place.

- Some water will remain inside the dishwasher when it has completed a wash cycle. This water is not suitable for drinking and may contain residues from the detergents that are used in the appliance.

Declaration of conformity

This appliance complies with the following European Directives:

- 73/23 dated 19/02/1973 Low Voltage Directive and subsequent modifications.
- 89/336 dated 03/05/1989 Electromagnetic Compatibility Directive and subsequent modifications.

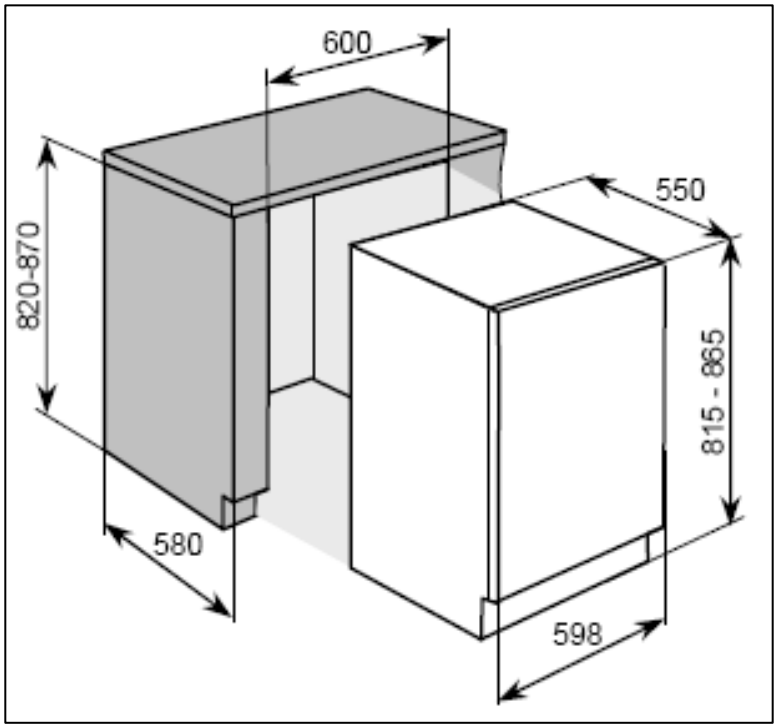
For future reference please record the following information which can be found on the rating plate and the date of purchase which can be found on your sales invoice. The rating plate of your dishwasher is located on the right hand side of the drop down door.

Model Number …….

Serial Number …….

Date of Purchase …….

Specifications



Product dimensions

Height: 815 – 865 mm
Width: 598 mm
Depth: 550 mm

Aperture dimensions

Height: 820 – 870 mm (MIN)
Width: 600 mm
Depth: 580 mm (MIN)

Product specifications

- **14 Place settings**
- **6 programs:** Normal
  Intensive
  Economy
  Rapid
  Glass
  1 hour
- **4 temperatures:** 40°C, 50°C, 60°C, 65°C
- Water consumption (Economy program): 12.5l/cycle
- Noise level: 49 dB
- Electronic aqua stop

- Delay start function
- Residual drying
- Concealed heating element
- Self-cleaning stainless steel micro-filter
- Anti-leak device
- Anti-flood device
- Height adjustable upper basket
- Collapsible plate racks
- Adjustable feet

Energy efficiency details

Energy efficiency class:	A+
Washing performance class:	A
Drying performance class:	A

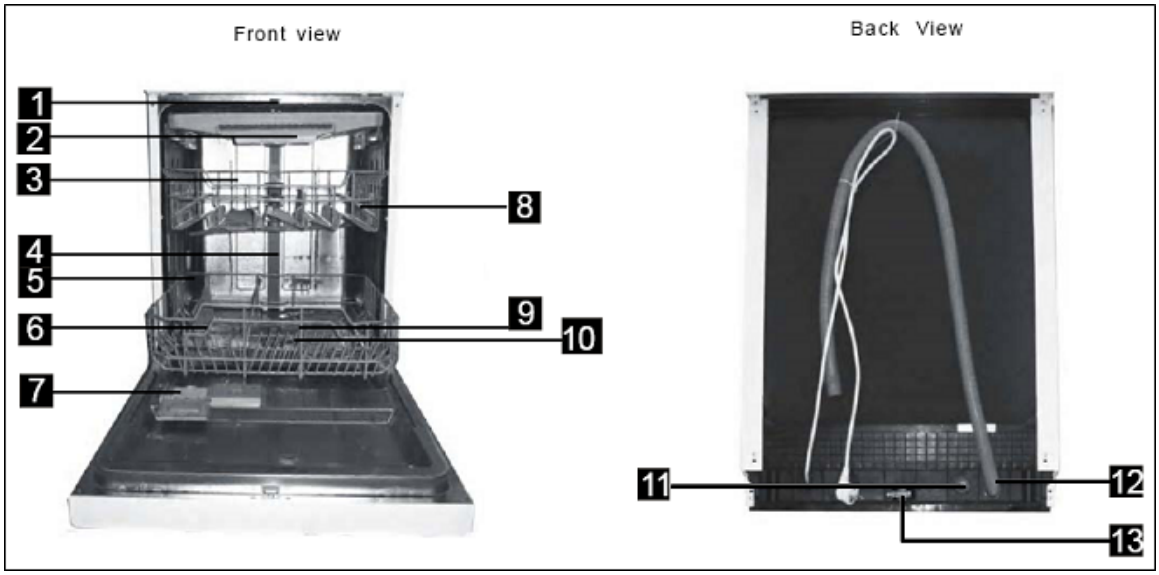
Power consumption

Off mode:	0.45 W
Left on mode:	0.55 W

Electrical details

Rated voltage:	230 Vac 50 Hz
Supply connection:	13 A (double pole switched fused outlet with 3 mm contact gap)

Description of the appliance



1) Top spray arm
2) Cutlery basket
3) Upper basket
4) Inner pipe
5) Lower basket
6) Salt container
7) Detergent dispenser
8) Cup shelf
9) Lower spray arm
10) Filter assembly
11) Inlet pipe connector
12) Drain pipe
13) Adjuster

Control panel

1) ON/OFF button
2) Delay start button
3) Power on indicator
4) Delay start indicators
5) Salt and rinse aid indicators
6) Program indicators
7) Program button

Using your dishwasher

Before first use

- Install the appliance as per the installation instructions contained within this booklet.

- Fill the water softener with 1 litre of tap water and then fill with specialist dishwasher salt. After this you should set the water softener level.

- Fill the rinse aid dispenser and then set the rinse aid dosage.

Filling with dishwasher salt

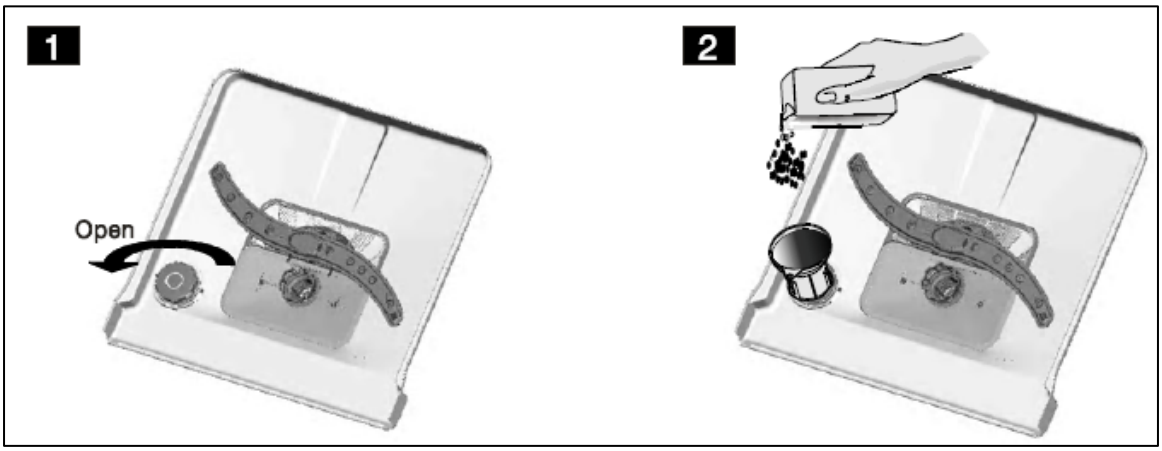
IMPORTANT: You should only use salt that is specially designed for use in a dishwasher. If any other type of salt is used in the appliance (in particular table salt), it will damage the water softener.

- Ideally you should fill the water softener with salt, just before you are about to run a wash program. This will help to clear any salt that may have overflowed from the water softener during the salt filling process.

- Open the door of the dishwasher and then remove the lower basket. The basket should be empty when you remove it.

- Turn the water softener cap anticlockwise and remove it.

- Pour 1 litre of water into the water softener.



IMPORTANT: It is only necessary to do this when you fill the container with salt for the first time.

- Pour salt into the water softener, using the funnel that is supplied with the appliance. You should add approximately 1.5 kg of salt into the water softener.

- It is perfectly normal for a small amount of water to come out of the water softener, whilst you are filling it with salt. This does not mean that the water softener is filled with the correct amount of salt.

- Refit and fully tighten the water softener cap.

- The salt required warning light will go out shortly after you have filled the water softener with salt. When the salt indicator **(5)** lights on the control panel, then you should follow the filling with dishwasher salt procedure again.

- It is recommended that you run a RAPID program, without any dishes loaded into the dishwasher, after filling with salt to remove any spilt or excess salt.

- ***IMPORTANT: You do not need to pour 1 litre of water into the container when you subsequently fill the water softener with salt.***

Setting the water softener level

It is possible to regulate the amount of salt that the water softener will release during a wash cycle. The water softener should be set to a level that is appropriate for the hardness of your water (please refer to the table below).

WATER HARDNESS				***Selector***	***Salt consumption (gram/cycle)***	***Usage (cycles/1 kg)***
° dH	**° fH**	**° Clarke**	**Mmol/L**			
0-5	0-9	0-6	0-0.94	H1 (RAPID light)	0	/
6-11	10-20	7-14	1.0-2.0	H2 (1 HOUR light)	20	60
12-17	21-30	15-21	2.1-3.0	H3 (1 HOUR and RAPID lights)	30	50
18-22	31-40	22-28	3.1-4.0	H4 (GLASS light)	40	40
23-34	41-60	29-42	4.1-6.0	H5 (GLASS and RAPID lights)	50	30
35-55	61-98	43-69	6.1-9.8	H6 (GLASS and 1 HOUR lights)	60	20

To alter the amount of salt that is released by the water softener, you should:-

- Open the door and switch on the appliance using the ON/OFF button **(1)**.

- Press and hold the program button **(7)** for about 5 seconds to enter the water softener setting mode. The salt and rinse aid indicators may light in the setting mode. You must choose a setting within 60 seconds of turning the appliance on.

- Repeatedly press the program button **(7)** to select the appropriate option according to the hardness of your water. The relevant indicators will light to show your choice as shown in the table above.

- When you have made your selection, press the ON/OFF button **(1)** to exit the setting mode.

- ***IMPORTANT:*** *If you are using 3 in 1 dishwasher tablets and live in a medium or hard water area, then you should still fill the water softener with salt. The water softener level should be set accordingly.*

Filling with rinse aid

The rinse aid is released during the final rinse and it helps to prevent water from forming droplets on your dishes. These droplets will lead to spots and streaks being left on items after the wash program has completed.

- Your dishwasher is designed to utilise liquid rinse aid.

- The rinse aid dispenser is located inside the drop down door, next to the detergent dispenser.

- To access the rinse aid dispenser, you should turn the cap anticlockwise and it will pop out of the hole. Then slowly pour in liquid rinse aid, the rinse aid dispenser will hold approximately 110 ml of rinse aid.

- Be careful not to overfill the dispenser, as this could cause oversudsing when a wash program is selected. Wipe away any rinse aid excess or spillages with a damp cloth.

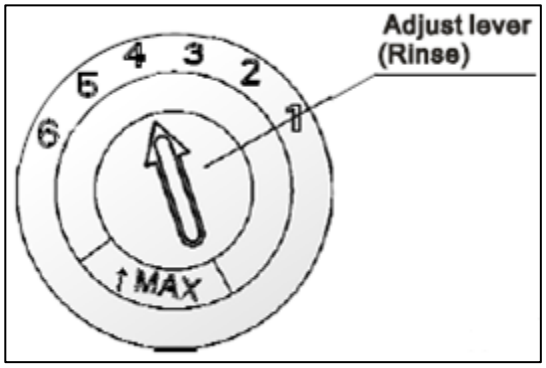
- Replace the cap and turn it clockwise until it locks into position.

- You should refill the rinse aid dispenser when the rinse aid indicator **(5)** lights on the control panel.

- ***IMPORTANT:*** *If you are using 3 in 1 dishwasher tablets then you should still fill the rinse aid dispenser.*

Setting the rinse aid level

The amount of rinse aid that the dishwasher requires also depends on the hardness of your water. You should experiment with the rinse aid setting, until you find a level that gives the best results.



- On the first wash cycle, we would recommend that the rinse aid level is set to number 4.

- If you get water spots and poor drying performance, then you should turn the arrow anticlockwise and increase the setting to the next number.

- You should continue to adjust the rinse aid level upwards until you get no water spots.

- If you get cloudiness or streaking on your dishes, the rinse aid level is set too high and it is causing foaming during the wash cycle. Turn the arrow clockwise and lower the setting to the next number.

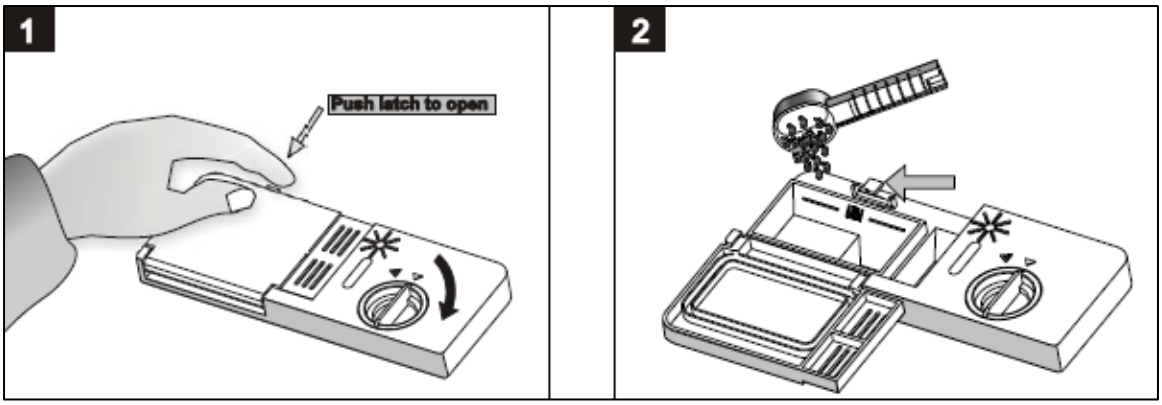
Filling with dishwasher detergent

- The detergent dispenser must be refilled at the start of each wash cycle.

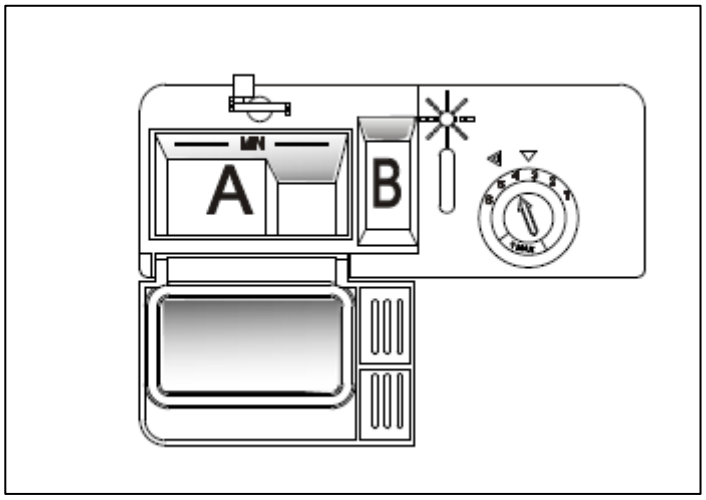
- Your dishwasher uses less detergent and rinse aid than a conventional dishwasher.

- In general, only one tablespoon of detergent is needed for a normal wash load. More heavily soiled items may need more detergent.

- Always add the detergent just before starting the wash program, otherwise the detergent could get damp and not dissolve properly.



- Open the lid that closes over the detergent dispenser by pushing the release button. The lid will spring open. Place the detergent inside of the dispenser.



- The section marked A in the diagram is for the main wash cycle detergent. Only one detergent tablet should be placed in the dispenser at any one time. If you are using detergent powder or liquid, you should follow the detergent manufacturer's recommendations.

- The section marked B in the diagram can have separate detergent placed in it for any wash cycle that has a pre-wash element to it, however this is optional. This must be a liquid or powder detergent, not another detergent tablet.

- Shut the detergent dispenser lid and press it until it locks into place.

- At the beginning of a wash cycle the clip will open and the tablet/powder/liquid will enter the dishwasher.

Concentrated detergent

- The use of the NORMAL program with concentrated detergents reduces pollution and is good for your dishes.

- This wash program is specifically suited to the dirt-dissolving properties of the enzymes of concentrated detergent. For this reason, the NORMAL program, in which concentrated detergent is used, can achieve the same results achieved in the INTENSIVE program.

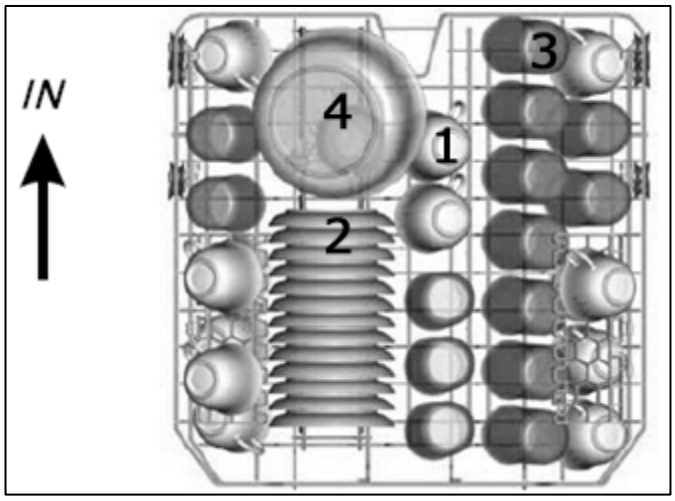
Detergent tablets

- Different brands of detergent tablets dissolve at different speeds. For this reason, some detergent tablets cannot dissolve and develop their full cleaning power during short programs.

- It is recommended that you use longer programs when using detergent tablets to ensure the complete removal of detergent residues.

Loading the upper basket

The upper basket is most suited to washing delicate and light dishware, such as glasses, coffee and tea cups, saucers, plates, bowls and shallow pans (that are not heavily soiled).



1. Cups
2. Saucers
3. Glasses
4. Large serving bowl

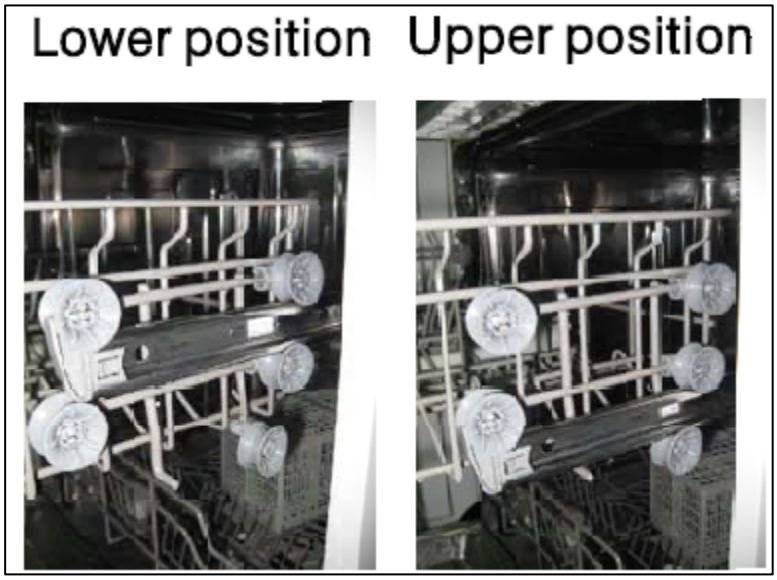
- You should position the dishes and cookware in such a way that they are not moved by the spray of water during the wash cycle.

- Use the diagram above as a guide to the most appropriate way to load the upper basket.

IMPORTANT: *Care should be taken when placing long stemmed glassware, such as champagne glasses in the upper basket. If they are not positioned correctly, then there is a risk that they may topple over when the upper basket is pushed in or pulled out.*

Adjusting the upper basket

Your dishwasher has an adjustable upper basket which you can alter to the most suitable position for the items you are going to wash in the upper and lower baskets.

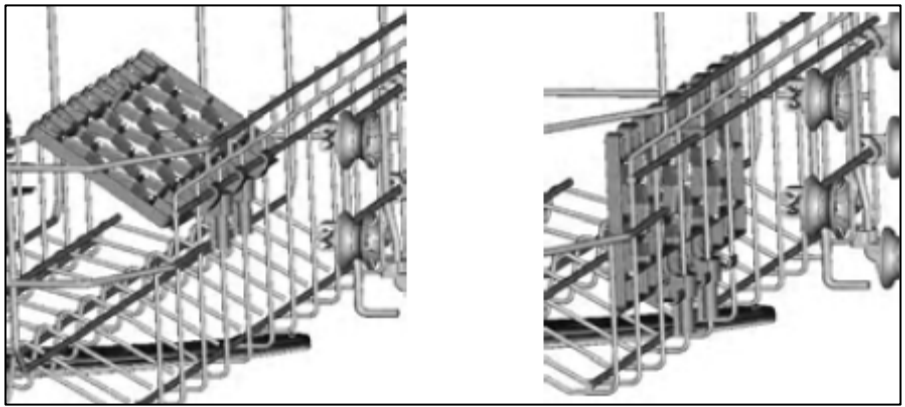


- The height of the upper basket can be adjusted by placing the wheels on a different height of the rails. Long items such as cutlery, salad servers and knives should be placed on the shelf so they do not obstruct the rotation of the spray arms.

- ***IMPORTANT:*** *The upper basket must be empty when you are removing it from the guide supports.*

Folding back the cup shelves

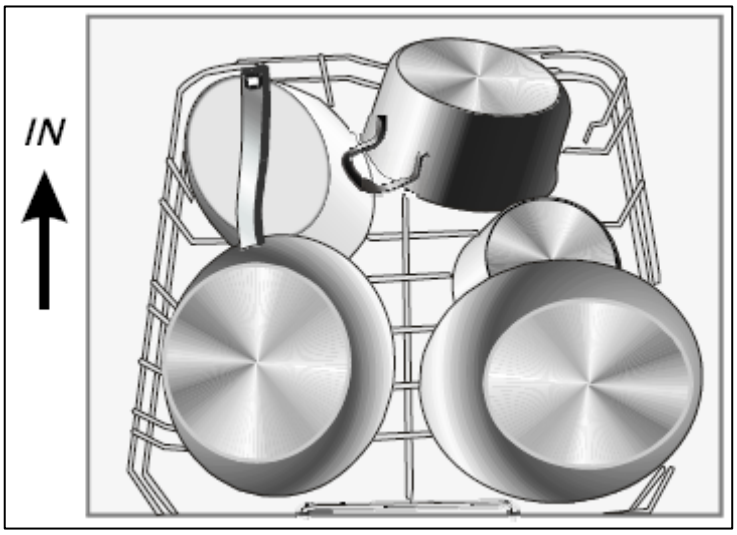
For easier stacking of pots and pans the cup shelf spikes can be folded down as shown in the diagram below.



IMPORTANT: Care should be taken to make sure that the spray arms can move freely when items have been loaded into the baskets.

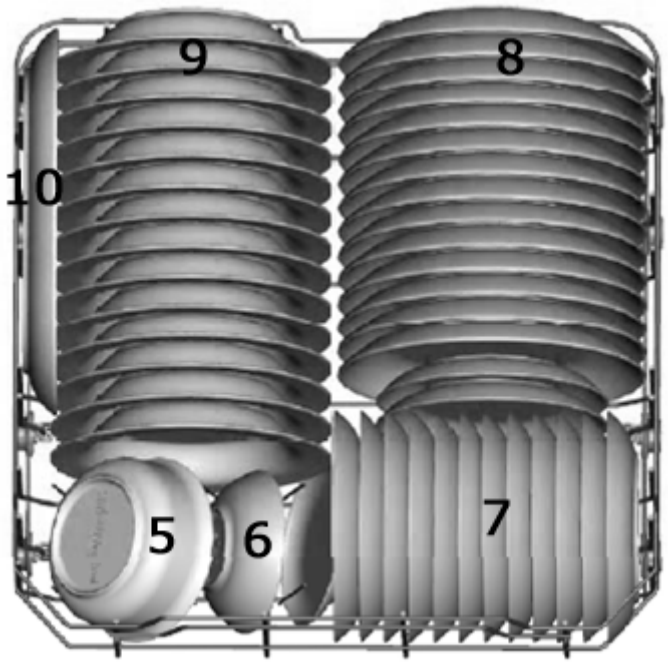
Loading the lower basket

The lower basket is most suited to washing larger and more heavily soiled items, such as saucepans, saucepan lids and serving dishes. You can also load bowls and a variety of plates into the lower basket.



- Saucepans and serving bowls must always be placed with their bases upwards.

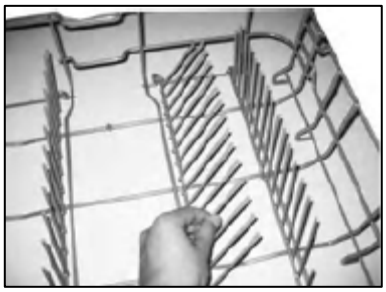
- Deep saucepans should be slanted, to allow water to run off.



5. Medium serving bowl
6. Small serving bowl

7. Dessert dishes
8. Dinner plates
9. Soup plates
10. Oval platter

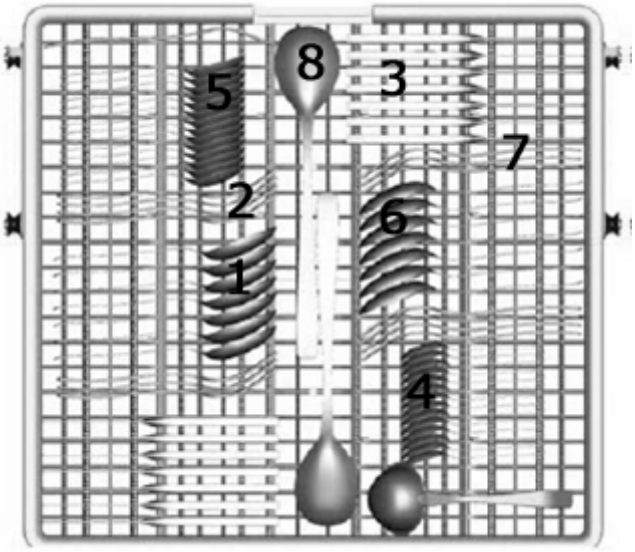
Folding spikes of lower basket



- The bottom rack has prongs that can be folded downwards, to allow for easier loading of larger saucepans and serving bowls.

The cutlery basket

Cutlery should be placed inside of the cutlery basket, separately from each other. You should take care to ensure that cutlery items do not touch as this may result in a poor wash performance.



1. Soup spoons
2. Forks
3. Knives
4. Teaspoons
5. Dessert spoons
6. Serving spoons
7. Serving forks
8. Gravy ladles

Loading dishes and cutlery

Household cloths, sponges or any other object that may absorb water SHOULD NOT be washed in a dishwasher.

- Remove leftovers and soften the remnants of burnt food in pans, prior to loading dishes in the appliance.

- Once the dishwasher has been loaded, check that the spray arms can move freely. If the spray arm comes into contact with any item, then you should rearrange the wash load.

- Cups, glasses, pans etc should all be loaded with their bases upwards, so that water does not collect inside of them.

- Cutlery and dishes should not cover each other; otherwise you may get poor wash results.

- Do not allow glasses to touch inside the dishwasher, otherwise damage may occur.

- Small objects can be placed inside of the cutlery basket.

The following items are NOT suitable for washing inside a dishwasher:-

- Cutlery with a handle of mother-of-pearl, wood, horn or china.

- Plastic items that are not resistant to heat.

- Cutlery that consists of glued parts that are not resistant to heat.

- Cutlery items or crockery that are bonded.

- Copper or pewter items.

- Lead crystal glass.

- Wooden platters.

- Synthetic fibre items.

The following items are not always suitable for washing inside a dishwasher:-

- Stoneware should only be washed if the manufacturer of the item has marked it as dishwasher safe.
- Plastic items (such as lunchboxes) should only be washed if the manufacturer has marked it as dishwasher safe.
- Glazed crockery may fade with repeated washing inside of a dishwasher.
- Items made of silverware or aluminium can discolour when washed inside a dishwasher.
- Any food residue should be removed from silver items immediately, as this can also result in discolouration.
- Certain types of glass may become dull or cloudy after a large number of washes.

Program table

Program	***Cycle***	***Program information***	***Description of cycle***	***Detergent pre / main***	***Program times* (mins)***	***Energy (Kwh)***	***Water (l)***	***Rinse aid***
INTENSIVE		For the heaviest soiled loads, such as pots, pans, casserole dishes and dishes that have been sitting with dried food on them for a while.	Pre-wash (50°C) Pre-wash Wash (65°C) Rinse Rinse (55°C) Drying	5/25g Or 3 in 1	165	1.4	20	
NORMAL		For normally soiled loads such as pots, plates, glasses and lightly soiled pans. A standard daily cycle.	Pre-wash (45°C) Wash (50°C) Rinse (Rinse (60°C) Drying	5/25g Or 3 in 1	180	1.25	16	

ECONOMY**		For lightly soiled loads, such as plates, glasses, bowls and lightly soiled pans.	Pre-wash Wash (50°C) Rinse (60°) Drying	5/25g Or 3 in 1	175	1.04	12.5	★
GLASS		For lightly soiled loads such as glasses, crystal and fine china.	Pre-wash Wash (40°C) Rinse Rinse (60°C) Drying	5/25g Or 3 in 1	120	0.91	16	★
1 HOUR		A daily wash program in only 1 hour. For lightly and normally soiled plates and pans.	Pre-wash (50°C) Wash (60°C) Rinse (60°C) Drying	5/25g	60	1.15	11.5	
RAPID		A shorter wash for lightly soiled loads that do not need drying.	Wash (40°C) Rinse (rinse (45°C)	20g	38	0.55	12	

***** The wash program times that are quoted are intended as a guide only. Please note that factors external to the machine, e.g. the temperature of your water supply, your water pressure etc. can affect the time it takes for the wash program to complete.

****** Economy is the testing program for EN 50242.

Setting a wash program

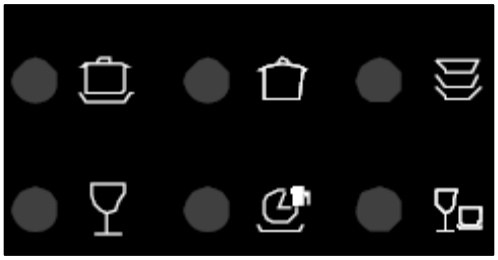
Make sure that the before first use section has been followed.

- o Check whether the appliance needs rinse aid or salt adding to it.
- o Pull out the top and bottom baskets, then load them in accordance with the loading instructions.
- o Push the top and bottom baskets fully back into position.
- o Add detergent.

- o Turn the appliance on by using the ON/OFF button **(1)**.

- ***IMPORTANT: Wait for 5 seconds before pressing the program selection button, otherwise the appliance may not function correctly.***

- Press the program button **(7)** to choose an appropriate wash program for the load that you are washing. The relevant program indicator **(6)** will light to show which program you have selected.



- Close the door firmly, so that you hear the door lock click shut.

- After a few seconds, you will hear the appliance begin to fill with water and the wash program will have started.

Changing the wash program

IMPORTANT: This should only be attempted when the cycle has only just started, otherwise the detergent may have already been released or you could have hot water escaping.

- Slightly open the door of the appliance and press the program button for about 3 seconds.

- The machine will cancel the program in progress and you can then select the required program as usual.

Adding more dishes

IMPORTANT: This should only be attempted when the cycle has only just started, otherwise the detergent may have already been released or you could have hot water escaping.

- Open the door a little way to pause the current program. Wait until the spray arms have stopped rotating before opening the door fully.

- The program light will stop blinking and a buzzer will sound every minute until the door is closed again.

- Add the forgotten dishes to the upper or lower basket.

- Close the dishwasher door. After about 10 seconds the wash program will continue automatically.

At the end of a wash program

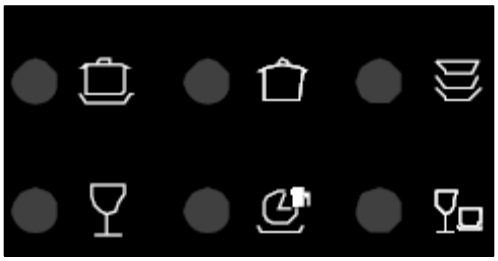
- The time display will flash for 8 seconds and a buzzer will sound.
- Open the door of the appliance.
- Use the ON/OFF button **(1)** to switch the dishwasher off.
- Wait for about 15 minutes before unloading the dishwasher to avoid handling the dishes and utensils while they are still hot and more susceptible to breakage. They will also dry better.
- It is recommended that you unload the lower basket first to avoid water dripping from the upper basket onto the dishes in the lower one.

Delay start function

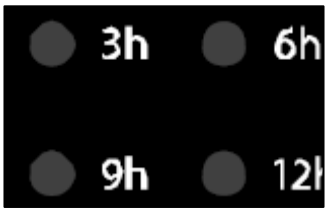
- Check whether the appliance needs rinse aid or salt adding to it.
- Pull out the top and bottom baskets, then load them in accordance with the loading instructions.
- Push the top and bottom baskets fully back into position.

- Add detergent
- Turn the appliance on by using the ON/OFF button **(1)**.
- ***IMPORTANT: Wait for 5 seconds before pressing the program selection button, otherwise the appliance may not function correctly.***

- Press the program button **(7)** to choose an appropriate wash program for the load that you are washing. The relevant program indicator **(6)** will light to show which program you have selected.



- Use the delay start button **(2)** to choose a delay start time of 3, 6, 9 or 12 hours in the future. The relevant delay start indicator **(4)** will light on the display.



- Close the door firmly, so that you hear the door lock click shut.

- When the programmed delay start time has elapsed, the dishwasher will automatically begin the chosen wash program.

Saving energy using your dishwasher

Loading dishes

- Refer to the relevant section of this manual for instructions on placing items in the dishwasher for the most efficient cleaning.

- Only run the dishwasher when it is full for optimum energy and water usage. Or use the half load option for smaller loads.

- Check the program table to select the most efficient program according to the size and type of the load.

- The ECONOMY program washes your items at a lower temperature and uses less water during the cycle. That is better for the environment and helps to cut energy costs as well as your water bill if you're on a water meter.

Usage

- Clean the filters regularly both to keep the dishwasher clean and to maintain its efficiency.

- Always remember to switch the appliance off standby when you have finished using it. £1 billion worth of energy is wasted in the UK every year by people leaving appliances on standby.

- You do not need to rinse dishes off before loading. If you prefer to pre-rinse, use cold water on your dishes before loading them but do not waste water by letting it run continuously.

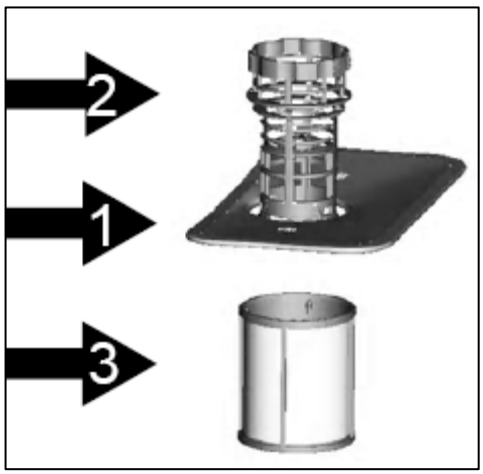
- Use the shorter and lower temperature cycles for everything but the dirtiest dishes. Shorter cycles use less energy and work just as well. Modern detergents also work just as well at lower temperatures.

Cleaning and maintenance

IMPORTANT: The appliance should be disconnected from your mains supply before commencing any cleaning process.

The filter system

Your appliance is fitted with three levels of filtering; these are located in the base of the dishwasher for ease of access.



1) Main filter

2) Coarse filter

3) Fine filter

Main filter- Food and soil particles are trapped by this filter and pulverised by a special jet on the lower spray arm. This debris is then washed down the drain.

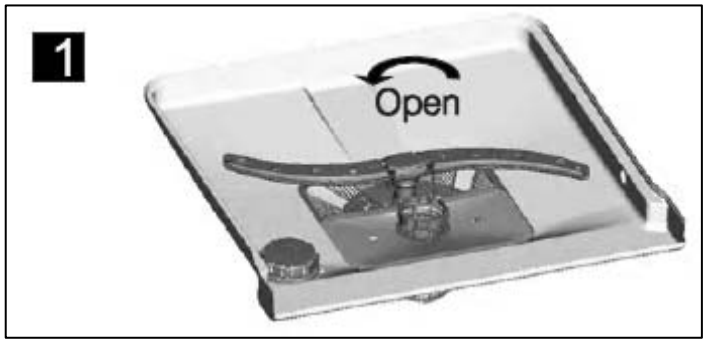
Coarse filter- Larger items such as pieces of bone or glass, which could clog the drain, are trapped in this filter.

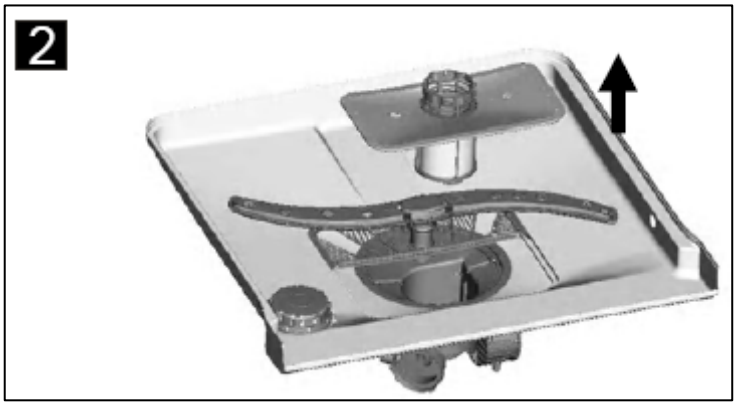
Fine filter- This filter holds soil and food residue in the sump area and prevents it from being redeposited on the dishes during a wash cycle.

IMPORTANT: *Whilst the filtering system is efficient, your dishwasher is not a waste disposal unit. All items being washed inside of the dishwasher should have food scraps removed from them before being loaded into the appliance*.

Cleaning the filters

For best performance and results, the entire filter assembly should be thoroughly cleaned regularly (ideally after each wash cycle).





1. Turn the coarse filter anti-clockwise and then lift it upwards. Rinse out this section under a tap to remove any food debris that remains in it.

2. Pull out the main filter and rinse this under the tap to remove any food debris that is trapped in it.

3. Pull out the fine filter and rinse this under the tap to remove any food debris that is trapped in it.

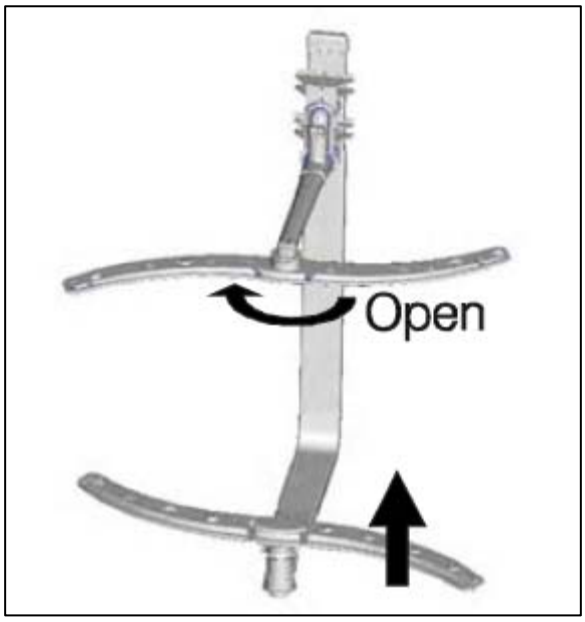
4. Place the fine filter back in its original position.

5. Place the main and coarse filter back into their original positions in the base of the dishwasher. You must turn the coarse filter clockwise to lock it back into position.

IMPORTANT: If a glass gets smashed inside of the appliance, you must check there is no glass in the filter before the machine is used again as this can cause a drainage failure.

IMPORTANT: THE DISHWASHER SHOULD NEVER BE SET ON A WASH CYCLE WITHOUT THE FILTERS BEING INSIDE OF THE APPLIANCE.

Cleaning the spray arms



The spray arms should be cleaned regularly, to prevent hard water deposits from clogging the spray arm jets and bearings.

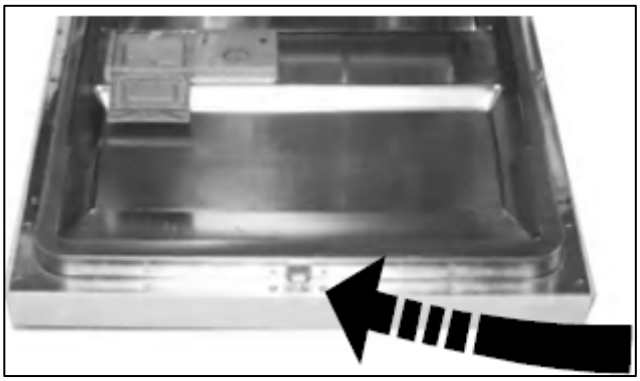
- To remove the upper spray arm, hold the nut and rotate the arm clockwise to remove it.
- To remove the lower spray arm, gently pull it upwards.
- Wash the spray arms in warm, soapy water and use a soft brush to clean the jets.
- Rinse the spray arms thoroughly and then reassemble the spray arms back in their original positions.

Cleaning the control panel

IMPORTANT: *Do not use any abrasive cleaner or household polish on either the control panel or operating parts.*

- Wipe over the control panel using a brand new damp cloth with warm water.

Cleaning the door



- o To clean the edge around the outside of the door, you should use a soft, damp cloth only.

- o To prevent water from penetrating the door lock or electrical components, ***DO NOT*** use a spray cleaner of any kind.

- o ***DO NOT*** use any abrasive cleaner or scouring pads on the inner or outer surfaces, as they may cause damage to them.

Error code failure system

If your appliance senses that it is not operating correctly, then a program indicator light may flash.

The following error codes can possibly be remedied by the customer and the steps outlined below should be followed.

BEFORE COMPLETING ANY MAINTAINEANCE ON THE APPLIANCE, IT SHOULD BE DISCONNECTED FROM YOUR MAINS POWER SUPPLY.

RAPID program indicator flashes.

o Longer than expected fill time.
✓ Check the water pressure of your mains water supply.
✓ Clean the mesh filter that sits in the inlet hose.
✓ Ensure that the inlet hose is not kinked or crushed.
✓ Make sure the water tap that the machine is connected to is turned on fully.

GLASS program indicator flashes.

o The machine has sensed water in the base.
✓ Check that the outlet hose is not kinked or crushed.
✓ Check that there are no blockages in the drain hose or the drainage system that the appliance is connected to.

- ✓ The drain pipe may be placed in too high a position or incorrectly. Check the installation instructions and ensure that the installation is correct.

  - o Once you have taken action to rectify the problem that has caused the fault code to appear, plug the machine back into your mains power supply.

  - o Turn the machine on using the ON/OFF button and wait for 5 seconds, before attempting to set a wash program, using the program selection button.

IMPORTANT: *If any other program indicators flash, you should not attempt to clear it yourself and contact the Baumatic Customer Care Department.*

IF THE FAULT CODE REAPPEARS AFTER FOLLOWING THE ABOVE ADVICE AND CLEARING THE FAULT CODE. YOU SHOULD TURN OFF THE APPLIANCE; DISCONNECT THE APPLIANCE FROM YOUR MAINS SUPPLY. THEN ARRANGE FOR AN ENGINEER TO ATTEND THE APPLIANCE. YOU SHOULD CONTACT BAUMATIC CUSTOMER CARE ON TELEPHONE NUMBER (0118) 933 6911.

Please note that if an engineer is asked to attend whilst the product is under guarantee and finds that the problem is not the result of an appliance fault, then you may be liable for the cost of the call out charge.

The appliance must be accessible for the engineer to perform any necessary repair. If your appliance is installed in such a way that an engineer is concerned that damage will be caused to the appliance or your kitchen, then he will not complete a repair.
This includes situations where appliances have been tiled in, sealed in with sealant, have wooden obstructions placed in front of the appliance, like plinths. Or any installation other than the one specified by Baumatic Ltd. has been completed.

Please refer to the conditions of guarantee that appear on the warranty card that you receive with the appliance.

IMPORTANT: Baumatic Ltd. operates a policy of continuous improvement and reserves the right to adjust and modify its products without prior notification.

General troubleshooting

PROBLEM	***POSSIBLE CAUSES***	***WHAT TO DO***
Dishwasher doesn't start.	**Fuse blown or the circuit breaker acted.**	Replace the fuse or reset the circuit breaker. Remove any other appliances sharing the same circuit with the dishwasher.
	Power supply is not turned on.	Make sure the dishwasher is turned on and the door is closed securely. Make sure the power cord is properly plugged into the wall socket.
	Water pressure is low.	Check that the water supply is connected properly and the water is turned on.
	Door of the dishwasher is not properly closed.	Make sure to close the door properly until it latches.
Water does not drain from dishwasher.	**Kink in the drain hose.**	Check the drain hose.
	Filter clogged.	Check the coarse filter.
	Kitchen sink is clogged.	Check the kitchen sink to make sure it is draining well. If the problem is the kitchen sink not draining, you may need a plumber rather than an engineer for the dishwasher.
Suds in the dishwasher.	**Improper detergent was used.**	Use only specific dishwasher detergent to avoid suds. If this occurs, open the dishwasher door and let the suds evaporate. Add 1 gallon of cold water to the interior and close the door. Select the RAPID program with no dishes loaded and allow the dishwasher to drain the water. Repeat if necessary.
	Spilled rinse-aid.	Always wipe up rinse-aid spills immediately.
Stained interior.	**A detergent with colourant was used.**	Make sure that the detergent used is one without colourant.
White film on interior surface.	**Hard water minerals.**	To clean the interior, use a damp sponge with an appropriate dishwasher descaler and wear rubber gloves. Never use any other cleaner than those specifically for

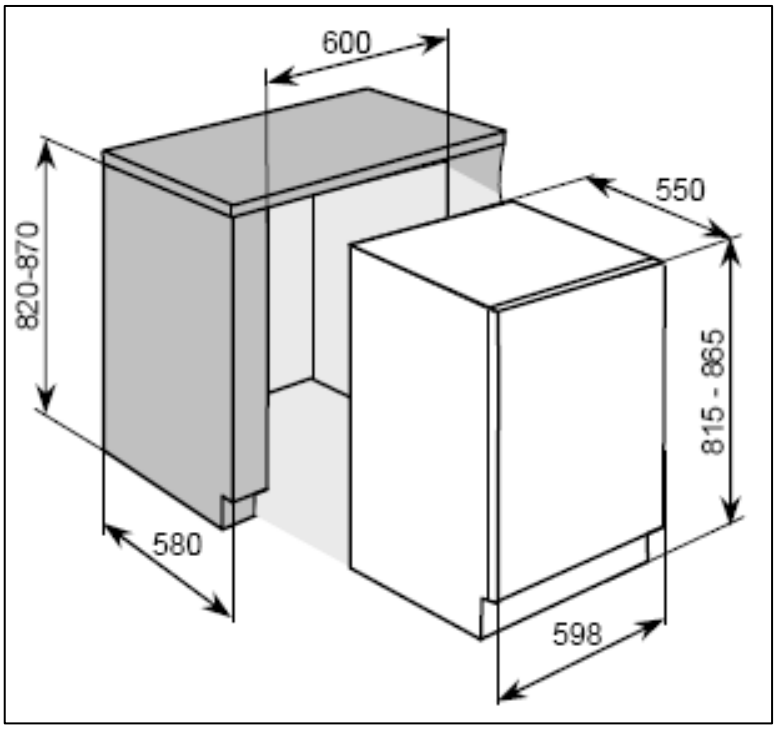
		dishwashers for the risk of foaming or suds.
There are rust stains on the cutlery.	**The affected items are not corrosion resistant.**	Avoid washing these items in the dishwasher and look for dishwasher-safe replacements in the future.
	A RAPID program was not run after dishwasher salt was filled so traces of salt have gotten into the wash cycle.	Always run a RAPID program without any dishes in the dishwasher after adding salt to remove any excess traces.
	The lid of the water softener is loose.	Check the lid seal to ensure it is secure.
Knocking noise in the wash cabinet.	**A spray arm is knocking against an item in the basket.**	Interrupt the program and rearrange the items which are obstructing the spray arm.
Rattling noise in the wash cabinet.	**Items of crockery are loose in the wash cabinet.**	Interrupt the program and rearrange the items of crockery.
Knocking noise in the water pipes.	**This may be caused by on-site installation or the cross-section of the piping.**	This has no effect on the dishwasher performance but if in doubt, contact a suitably qualified plumber.
The dishes are not clean.	**The dishes were not loaded correctly.**	See the section on loading the dishwasher baskets for instructions.
	The program was not powerful enough.	Select a more intensive program. Please refer to the program table.
	Not enough detergent was used.	Use more detergent next time or change the brand.
	Items are blocking the path of the spray arms.	Rearrange the items so that the spray arms can rotate freely.
	The filter assembly in the base of the dishwasher cabinet is not clean or not correctly fitted. This may cause the spray arm jets to get blocked.	Clean and/or fit the filter assembly correctly. Clean the spray arms jets. Refer to the relevant sections of this manual.
Cloudiness on glassware.	**Combination of soft water and too much detergent.**	Use less detergent if you have soft water and select the RAPID program to wash glassware and get them clean.
Black or grey marks on dishes.	**Aluminium utensils have rubbed against dishes.**	Use a mild abrasive cleaner to eliminate those marks.

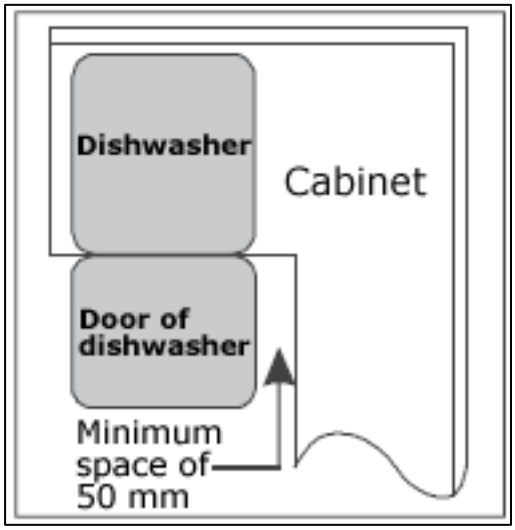
Detergent left in the dispenser.	**Dishes are blocking the detergent dispenser.**	Re-load the dishes properly.
The dishes are not drying.	**Improper loading of crockery.**	Load the dishwasher as suggested in the relevant instructions.
	Too little rinse-aid was used.	Increase the amount of rinse-aid or refill the rinse-aid dispenser.
	Dishes were removed too soon.	Do not empty your dishwasher immediately after washing. Open the door slightly so that the steam can escape. Begin unloading the dishwasher only once the dishes are barely warm to the touch. Empty the lower basket first to prevent water dropping from the dishes in the upper basket to the ones below.
	The wrong program was selected.	The RAPID program does not feature a drying section and shorter programs have lower wash temperatures. Choose a program with a longer washing time.
	Use of cutlery with a low-quality coating.	Water drainage is more difficult with these items. Cutlery or dishes of this type are not suitable for washing in the dishwasher.

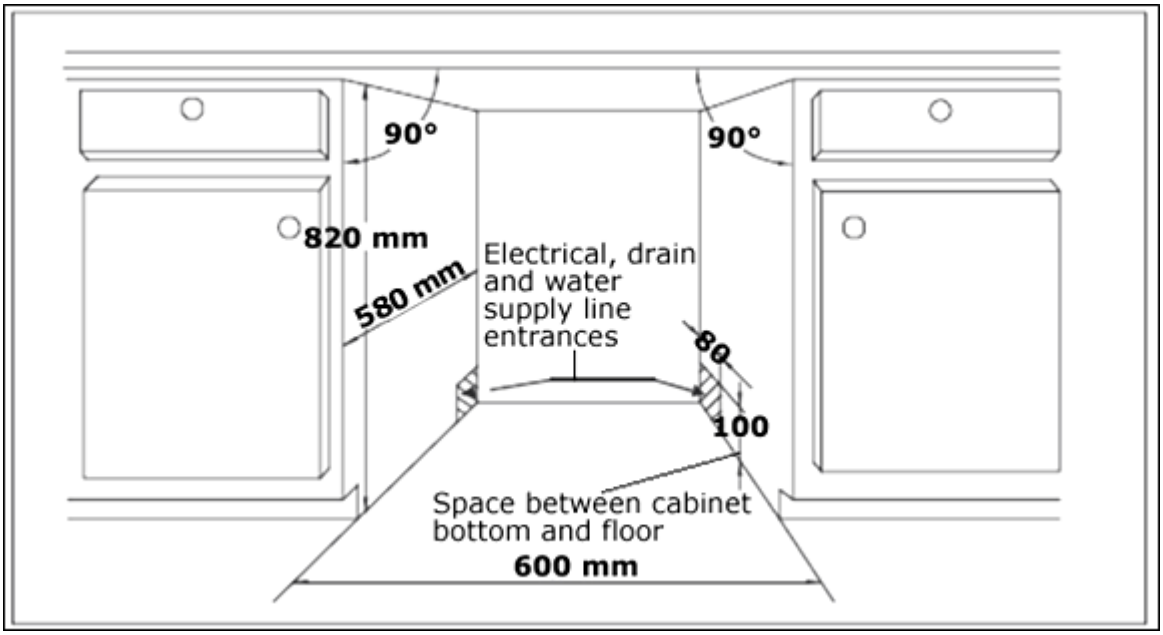
Installation

IMPORTANT: THIS INSTALLATION MUST BE COMPLETED BY A SUITABLY QUALIFIED PERSON. BAUMATIC ONLY SANCTION THE INSTALLATION GIVEN IN THIS INSTRUCTION MANUAL. YOU SHOULD DISPOSE OF ALL PACKAGING IN AN ENVIRONMENTALLY FRIENDLY MANNER.

Aperture requirements







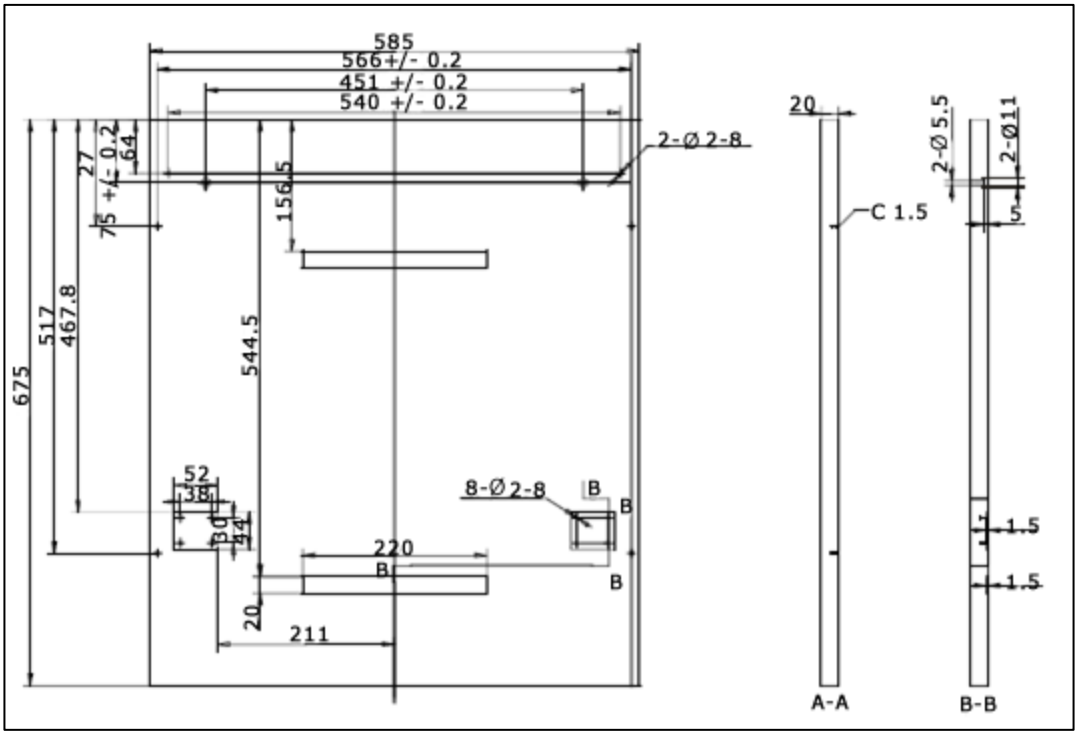
- The aperture that your dishwasher needs to be installed into should resemble the one shown in the drawings on the previous page.

- There should be less than a 5 mm gap between the top of the dishwasher and the underneath of the worktop. The height of the aperture required will vary between 820 – 870 mm depending on the height of the adjustable feet.

Installation stages

1. Preparing and connecting the furniture door.
2. Adjusting the tension of the door spring.
3. Connecting to the mains water supply
4. Connecting to the water outlet
5. Connecting to the power supply
6. Applying the condensation strip
7. Positioning the dishwasher
8. Levelling the dishwasher
9. Securing the dishwasher

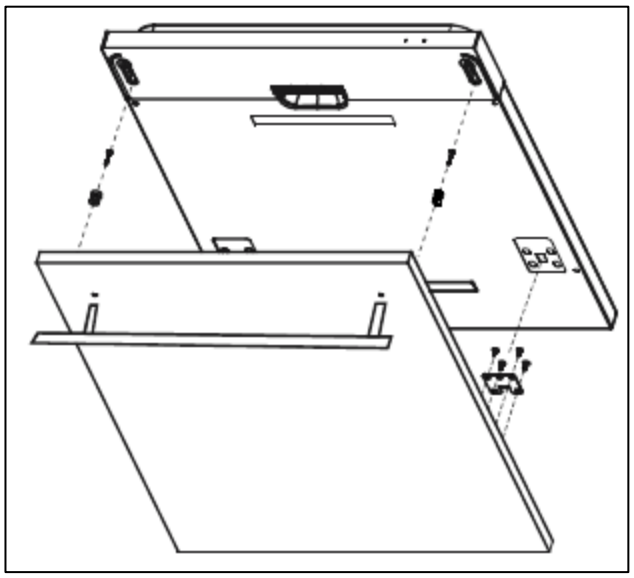
Preparing and connecting the furniture door



- ***IMPORTANT:*** *The furniture door is not supplied with the appliance. You should purchase one to match with the rest of your kitchen cabinets.*

- ***The maximum weight of the furniture door should be 5.5 kilograms. The maximum thickness of the furniture door should be 15 mm.***

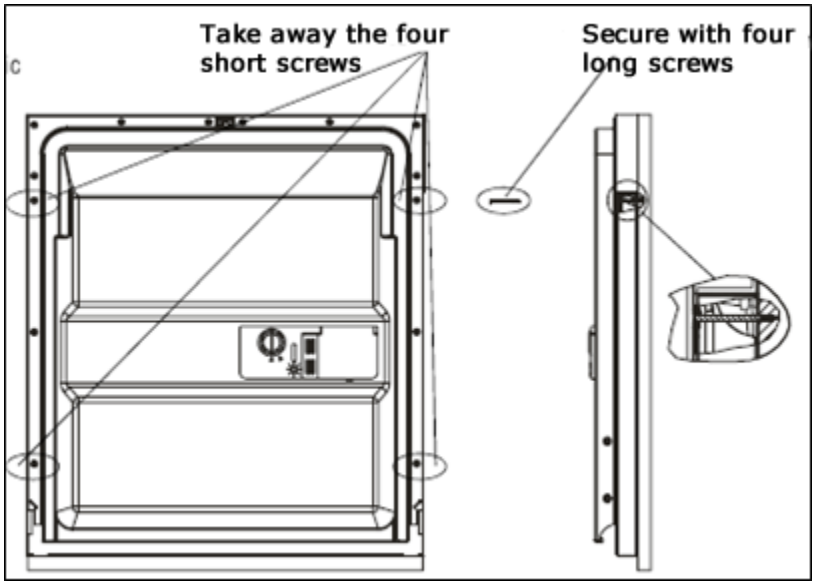
- Use the installation template supplied with the appliance to mark up and then drill out the necessary holes in the furniture door.



- Attach the upper and lower hooks onto the furniture door.

- Lift the furniture door towards the dishwasher door, ensuring that the upper and lower hooks locate into the slots on the outside of the dishwasher door.

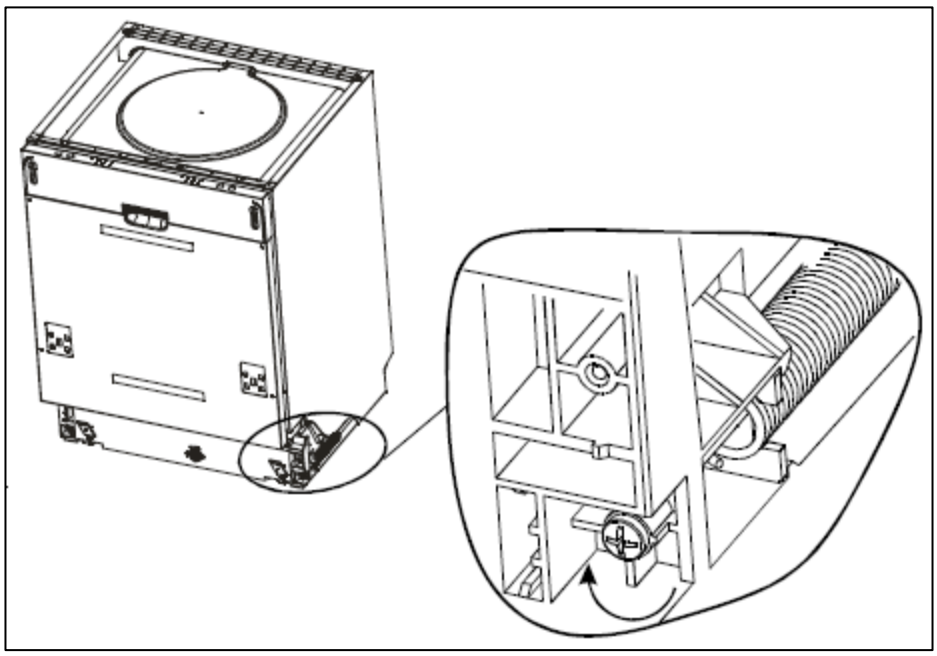
- Push the furniture door downwards so it locks into place on the dishwasher door.



- Open the dishwasher door and remove the four short screws.

- Use the four long screws to secure the panel to the door.

Adjusting the tension of the door spring



- The door of the dishwasher is attached to springs. These are set at the factory to ensure that they are at the proper tension, so that the door can open and close smoothly.

- After the furniture door has been fitted, you will need to adjust the tension of the door spring.

- Using a suitable screwdriver, rotate the adjusting screw shown in the image above to either tighten or slacken the steel cable.

- The doors' spring tension is correct when:-

  a) The door remains horizontal when in the fully opened position.

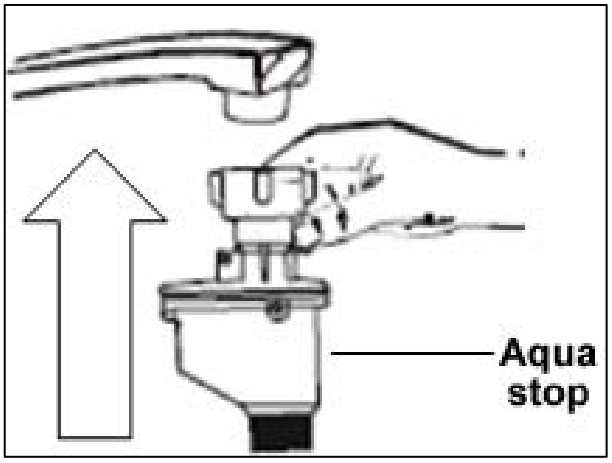
  b) You are able to shut the door easily, by raising the door using your fingers.

- ***WARNING:*** *If you do not adjust the tension of the door spring, then it could cause damage to the appliance.*

Connecting to the mains water supply

IMPORTANT: *Do not connect the appliance to your mains water supply using an old or an existing water inlet hose. The inlet hose supplied with the dishwasher is the ONLY one that should be used.*

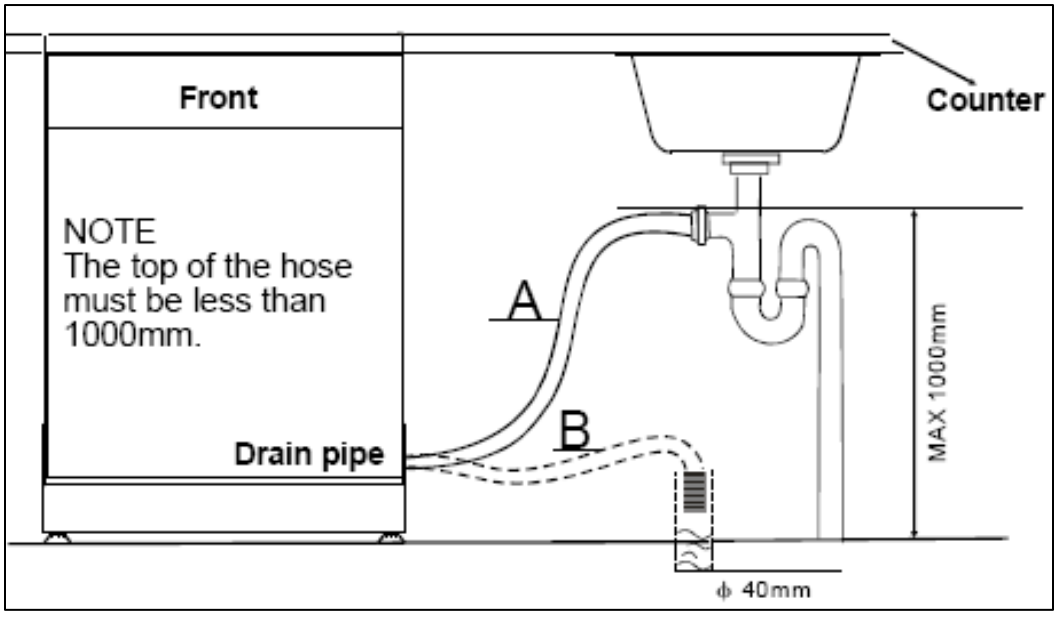
DO NOT CONNECT THE WATER INLET HOSE TO A HOT WATER TAP.



- The inlet hose will be located inside the cabinet of the dishwasher.
- Connect the water inlet hose to a threaded water tap that has a 3/4" thread and to the inlet hose connector on the appliance.
- Fully tighten the inlet hose to the water tap and the dishwasher.

IMPORTANT: The inlet hose is fitted with an aqua stop. This MUST be fitted in the upright position, as shown in the above diagram.

Connecting to the water outlet



- Secure the drain hose, so that it cannot move whilst the dishwasher is in use.

- Place the end of the drain hose on your drain pipe. Push it a short way down into your drain pipe. The drain pipe must have a minimum diameter of 40 mm.

- The top of the drain hose must be no higher than 1000 mm.

- ***IMPORTANT:*** *Do not insert the drain hose too deeply into the pipe, as this may cause siphoning.*

- ***NEVER EXTEND THE DRAINAGE HOSE FROM ITS ORIGINAL LENGTH.***

Connecting to the power supply

- ***IMPORTANT: The electrical socket must still be accessible once the appliance is installed.***

- Consult the rating plate, located on the right hand side of the drop down door ***BEFORE*** making the electrical connections. Ensure that the voltage reaching the plug is the same as that on the rating plate.

- ***DO NOT REMOVE THE RATING PLATE AS THE INFORMATION ON IT IS IMPORTANT.***

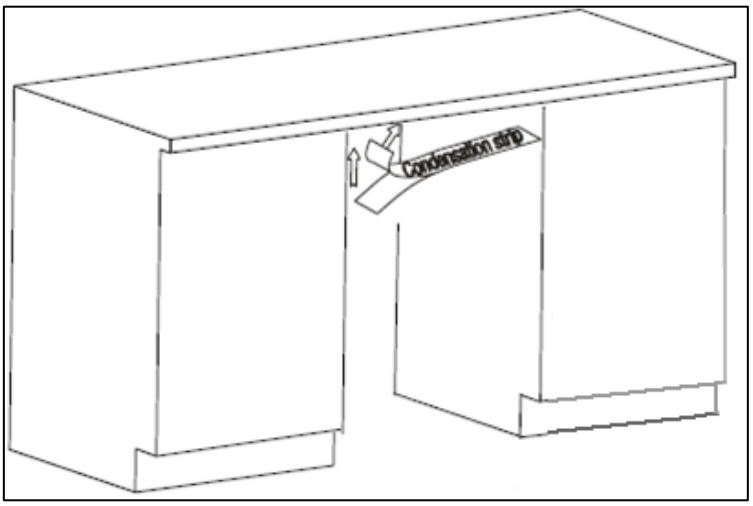
- The moulded plug that is supplied with the appliance must be placed into an earthed and insulated socket.

- Broken or damaged power leads must only be replaced by a suitably qualified person. A power lead of a similar type must be used in replacement.

- Power lead type – H 0 V V – F 3G 1,5.

- ***IMPORTANT:*** *We do not recommend that this appliance is connected to an extension lead.*

Applying the condensation strip



- The condensation strip must be fitted to the underside of the worktop to protect it against the ingress of moisture. The strip will deflect steam that rises from your appliance, away from the underneath of the worktop.

- The condensation strip will be located inside of your dishwasher.

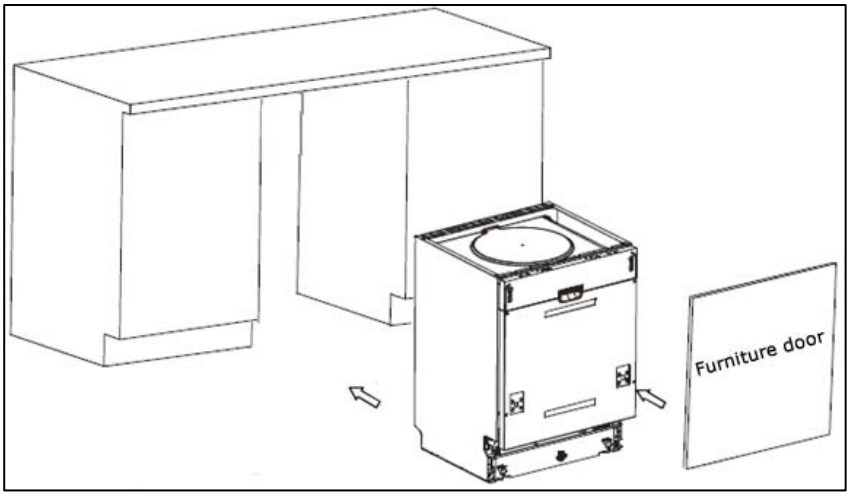
- Ensure that the underneath of the worktop is clean before sticking the strip to it.

- Separate the backing paper away from the strip.

- Stick the condensation strip to the underneath of the worktop.

- ***IMPORTANT:*** *Failure to attach the condensation strip could result in damage to your worktop.*

Positioning the dishwasher

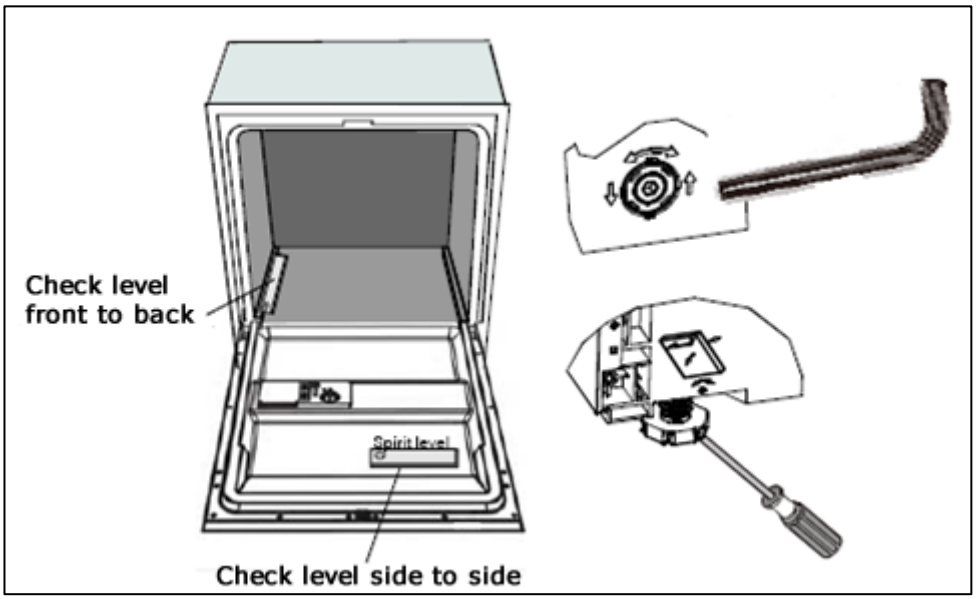


- Carefully slide the dishwasher back into position, underneath the worktop.

Levelling the appliance

- ***IMPORTANT:*** *Your dishwasher must be level for it to operate properly.*

- Make sure that the dishwasher is supported whilst it is being levelled, otherwise it may tip over.



- Rotate the adjustable feet to level the appliance accordingly.
- Use a spirit level to check that the appliance is level.
- Check that the appliance is level from side to side.
- Check that the appliance is level from front to back.

Securing the dishwasher

The dishwasher must be secured to the worktop, this can be done in one of two ways:-

- ***Standard worktop***- Secure the dishwasher to the underside of the worktop by using two wood screws **(A)**.

- You should screw through the holes in the brackets at the top of the dishwasher cabinet.

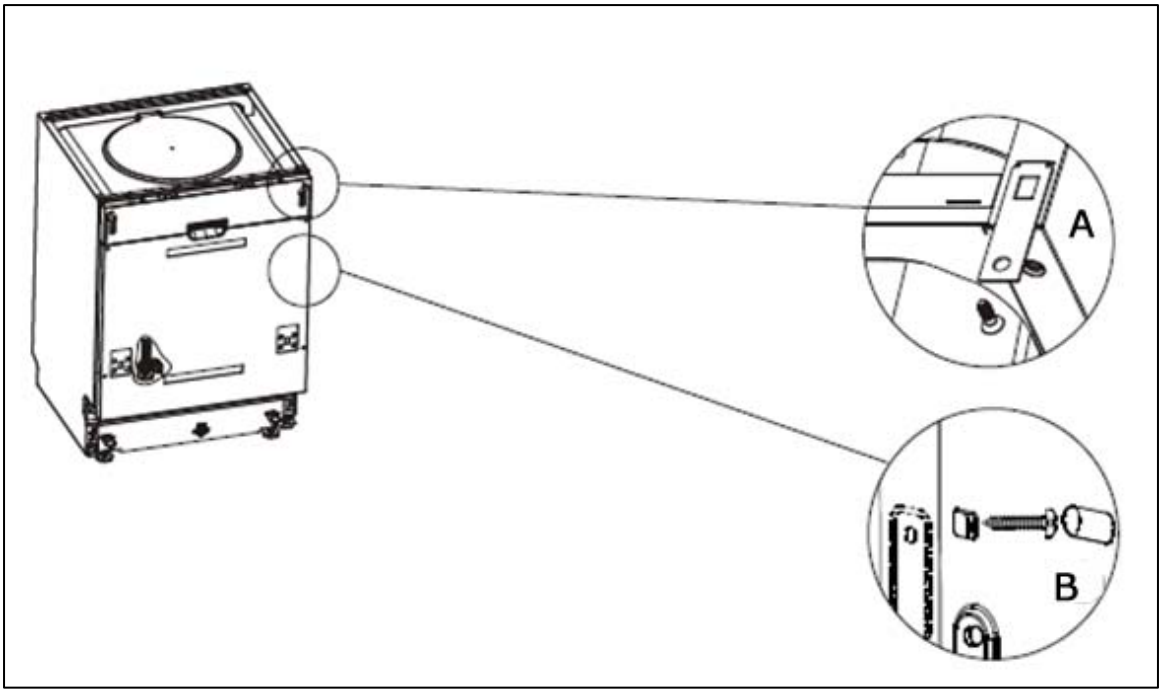
- These screws should be fully tightened.

- ***Marble/granite worktop***- The material of the worktop will mean that it is impossible to put a screw through the underneath of the worktop.

- On either side of the front edge of the dishwasher cabinet, there is a rubber stopper. You should remove the rubber stoppers, to reveal a pre-drilled hole on either side of the dishwasher.

- Secure the dishwasher to the cupboard either side of it, by screwing a wood screw through the pre-drilled holes into the cupboards. These screws should be fully tightened **(B)**.

- The rubber stoppers should then be refitted into their original position.



Before first use

You should check the following before using the appliance for the first time:-

- That the dishwasher is level and fixed in position.
- That the water tap is fully open.
- That there are no leaks at either end of the drain or inlet hoses.
- That the inlet and outlet hose are fully tightened.
- That the inlet and outlet hoses are not kinked.
- That the power is switched on.
- That the water softener has been filled with 1 litre of water and salt.
- That the rinse aid dispenser has been filled.

Baumatic consumables

- **BC001** Degreaser for Dishwashers (200 g)
- **BC002** Descaler for Washing Machines and Dishwashers (200 g)
- **BC003** Ceramic Hob Cleaner (250 ml)
- **BC004** Oven Cleaner (250 ml)
- **BC005** Stainless Steel Cleaner and Protector (250 ml)
- **BC007** E-Cloth – General Purpose Cloth
- **BC008** Microwave Cover

To order a Baumatic consumable product please call 0123 5437 244 and quote the product code. You can also order online from eshop.baumatic.co.uk

Technical Data

Manufacturer	BAUMATIC LTD
Model Number	BDWI640
Standard Place Settings	14
Energy Efficiency Class **(1)**	A+
Annual Energy Consumption **(2)**	299 kWh
Energy Consumption of the Standard Cleaning Cycle	1.04 kWh
Power Consumption of Off Mode	0.45 W
Power Consumption of Left-On Mode	0.55 W
Annual Water Consumption **(3)**	3500 litres
Drying Efficiency Class **(4)**	A
Standard Cleaning Cycle **(5)**	Economy 50°C
Program Duration of the Standard Cleaning Cycle	175 mins
Noise Level	49 dB
Installation Type	Built-in

(1) On a scale from A+++ (highest efficiency) to D (lowest efficiency).

(2) Annual energy consumption based on 280 standard cleaning cycles using cold water fill and the consumption of the low power modes. The actual energy consumption will depend on how the appliance is used.

(3) Annual water consumption based on 280 standard cleaning cycles. The actual water consumption will depend on how the appliance is used.

(4) On a scale from A (highest efficiency) to G (lowest efficiency).

(5) This program is suitable for cleaning normally soiled tableware and is the most efficient program in terms of combined energy and water consumption.

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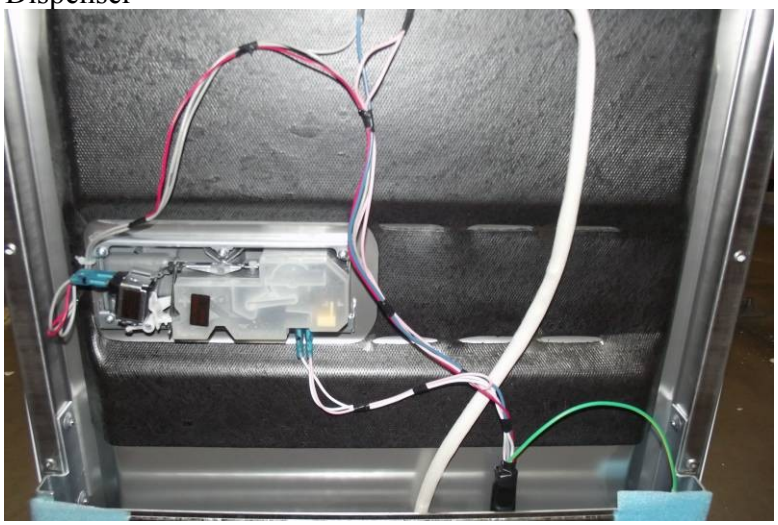
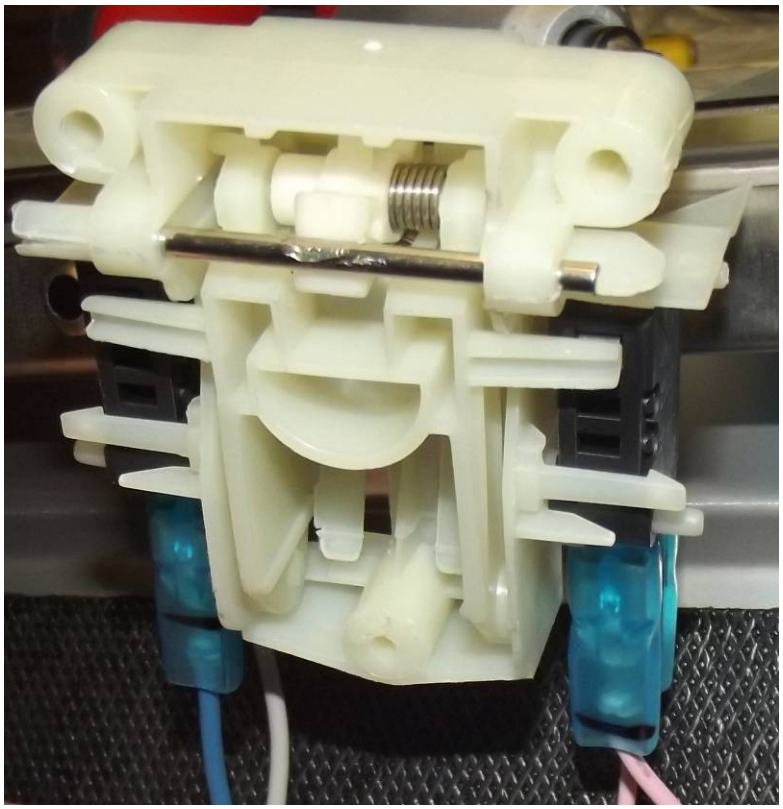
Dispenser



Door lock



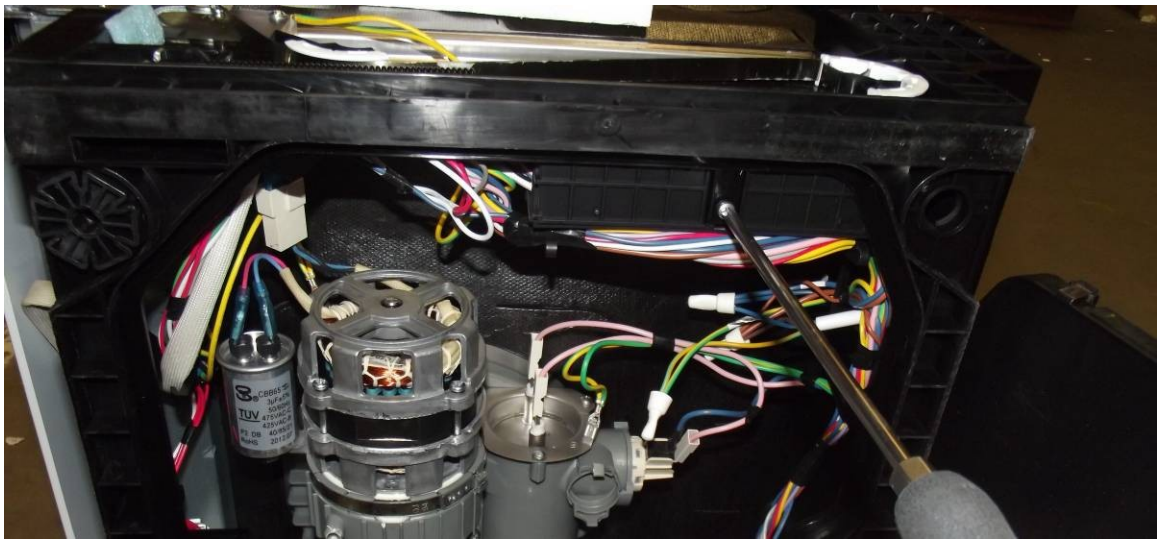
Control panel

RHS of the appliance

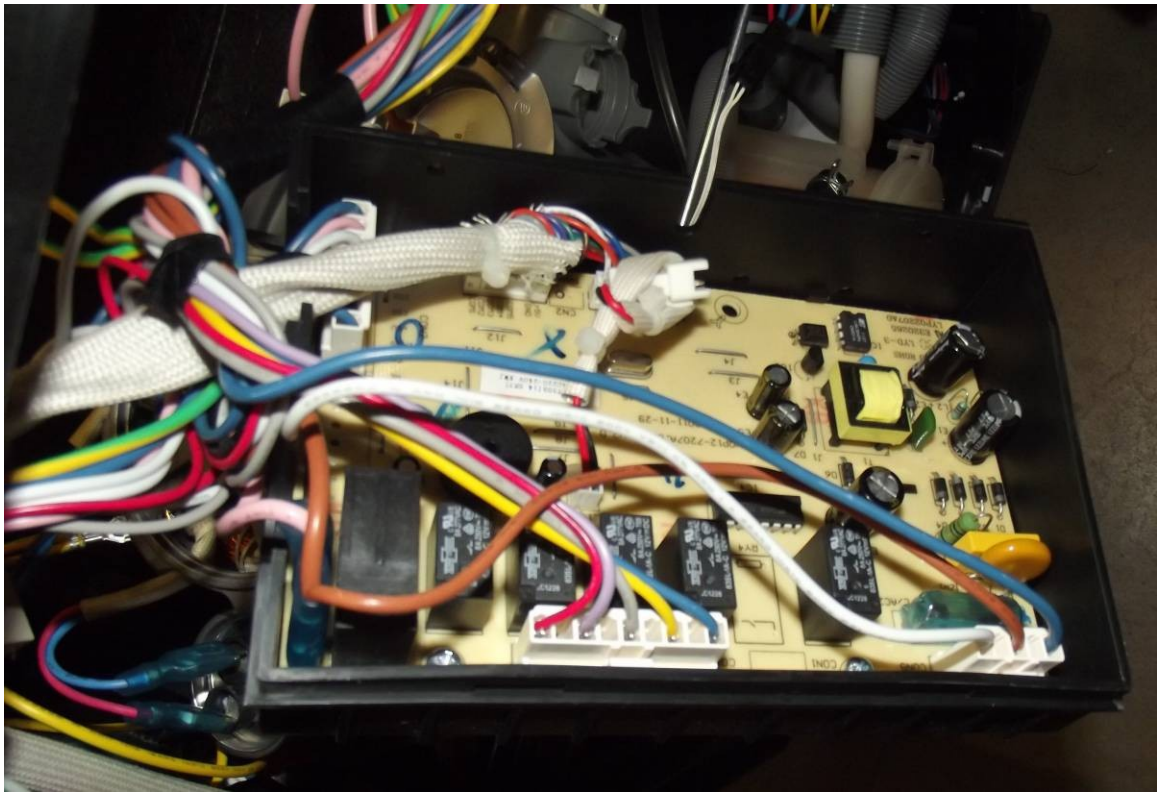
Bottom

Bottom

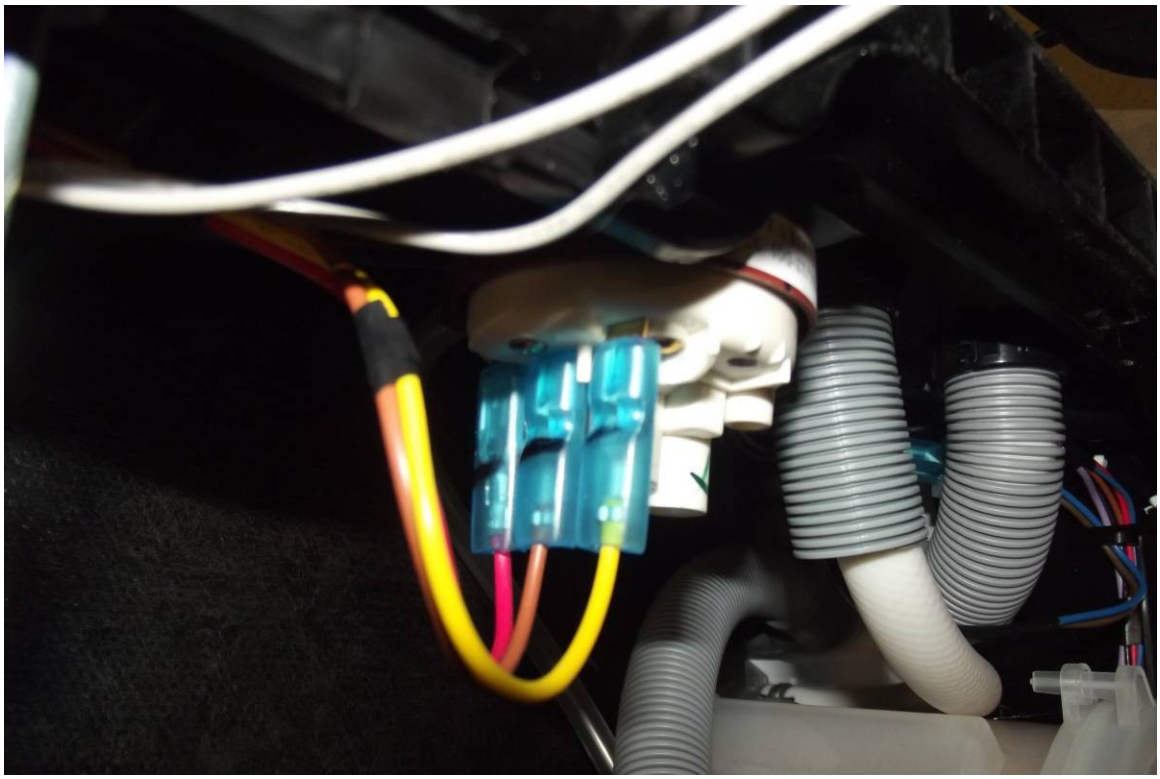
Screw for Main PCB



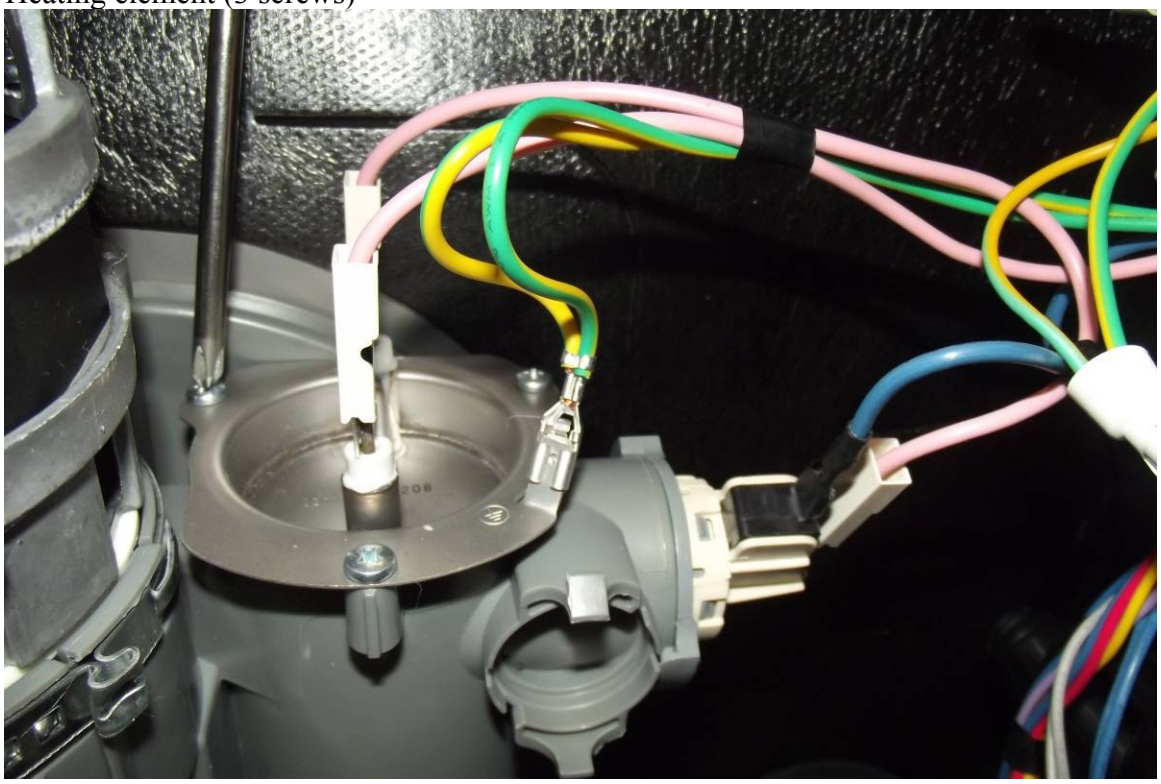
Main PCB



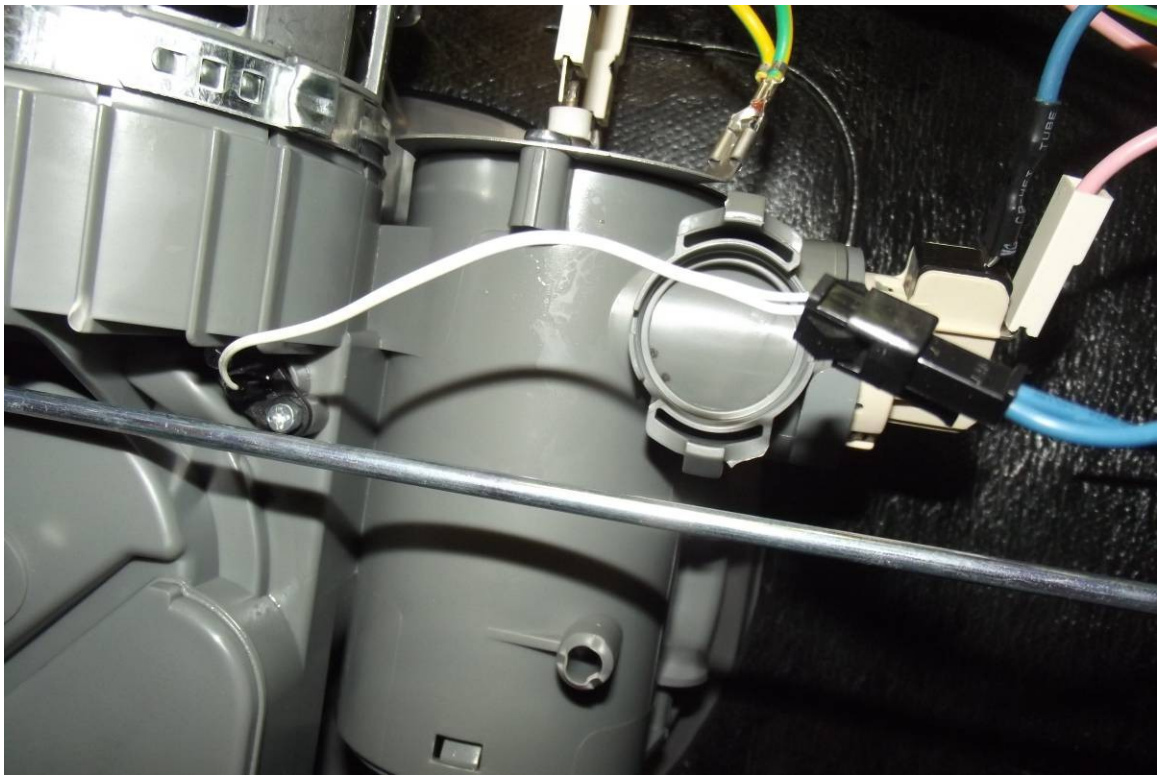
Pressure switch



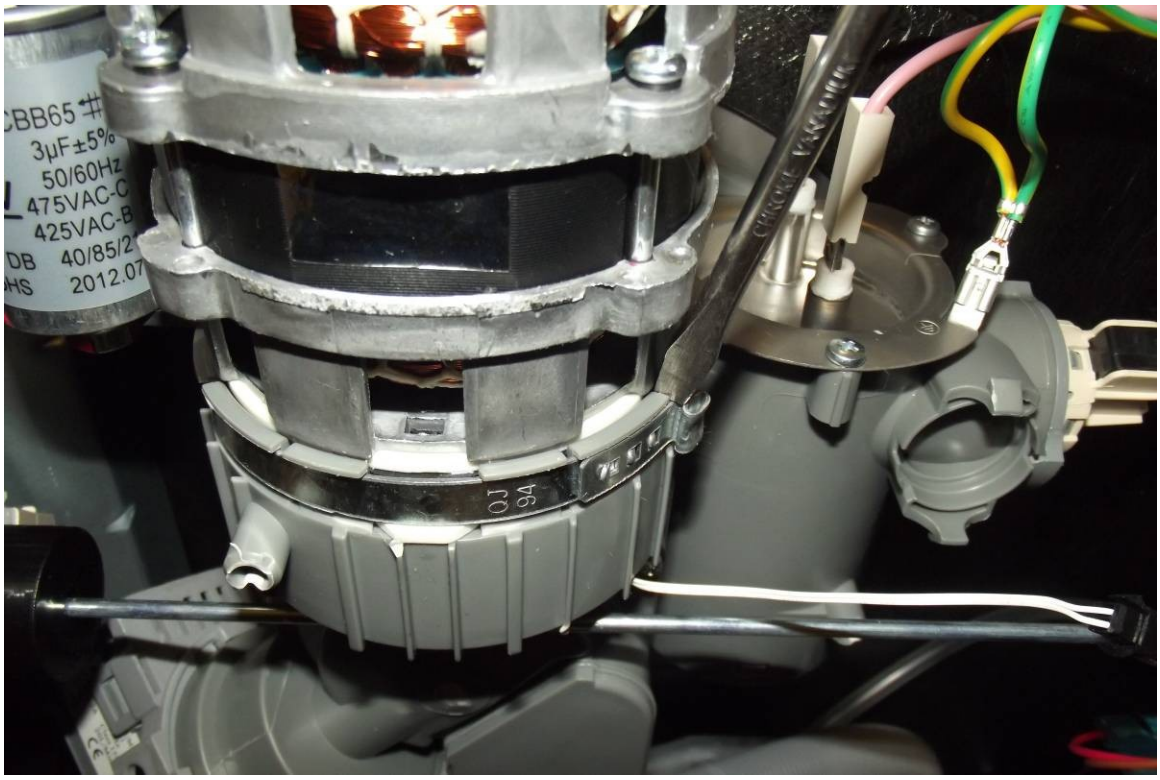
Heating element (3 screws)



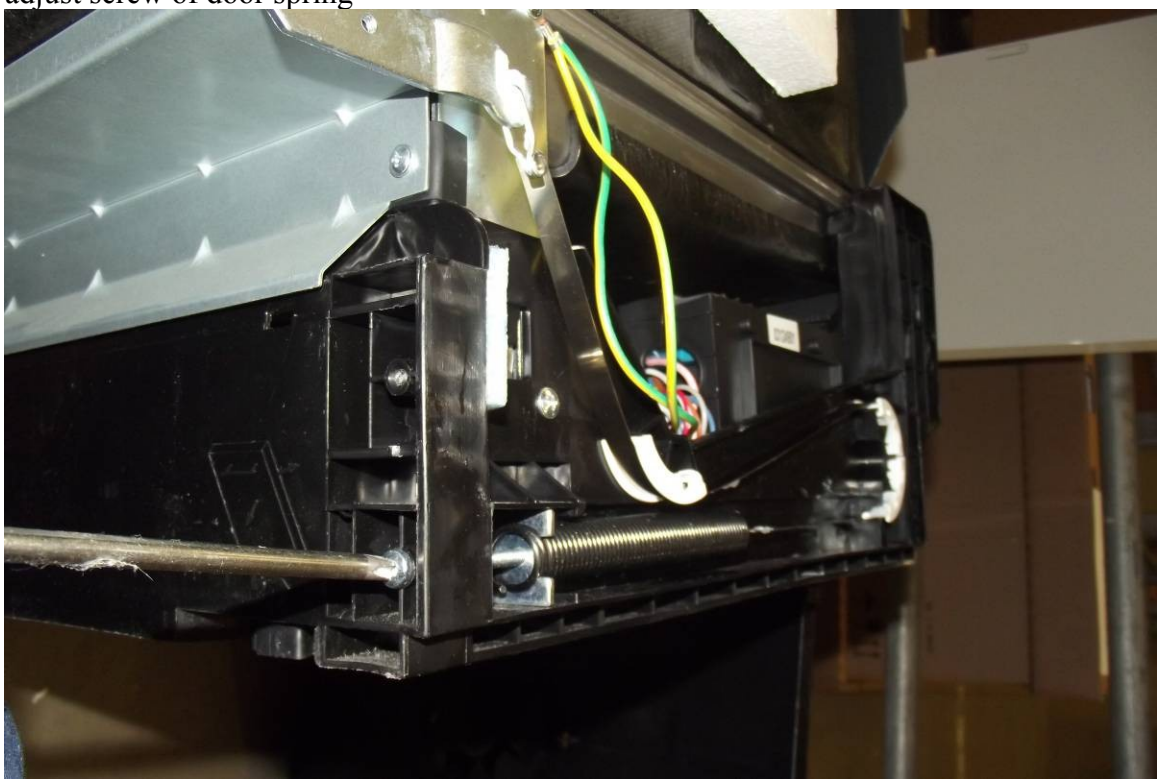
Sensor



Motor



adjust screw of door spring



Heating element